

PAID T.R.A.

Chk # 122835

Amount 25.00

Rec'd By JR

Date 6-30-00

SWIDLER BERLIN SHEREFF FRIEDMAN, LLP
REGULATORY AUTH.

JUN 30 PM 2 03

OFFICE OF THE
EXECUTIVE SECRETARY

3000 K STREET, NW, SUITE 300
WASHINGTON, DC 20007-5116
TELEPHONE (202) 424-7500
FACSIMILE (202) 424-7643

00-00561

NEW YORK OFFICE
405 LEXINGTON AVENUE
NEW YORK, NY 10174

June 29, 2000

VIA OVERNIGHT DELIVERY

K. David Waddell, Executive Secretary
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, TN 37243

Re: Application of Vitts Networks, Inc. for a Certificate of Convenience and Necessity to
Provide Facilities-Based and Resold Local Exchange and Interexchange
Telecommunications Services Throughout the State of Tennessee

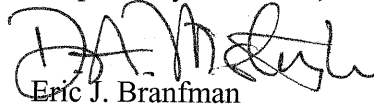
Dear Mr. Waddell:

On behalf of Vitts Networks, Inc. (Vitts"), please find enclosed an original and thirteen (13) copies of Vitts' Application Certificate of Convenience and Necessity to Provide Facilities-Based and Resold Local Exchange and Interexchange Telecommunications Services Throughout the State of Tennessee. Also enclosed is a check in the amount of \$25.00 to cover the requisite filing fee.

Please note that Exhibits 3-6 contain confidential and proprietary information not generally available to the public. Vitts, therefore, is submitting one copy of this information in separately sealed envelopes attached to the original copy of the application. Vitts respectfully requests that the information contained in Exhibits 3-6 be given confidential treatment and that it not be made a part of the public record or otherwise be made available for public disclosure.

Please date stamp and return the extra copy of this filing in the self-addressed, postage-prepaid envelope provided. Should you have any questions concerning this matter, please do not hesitate to contact D. Anthony Mastando at (202) 424-7500.

Respectfully submitted,



Eric J. Branfman

D. Anthony Mastando

Counsel for Vitts Networks, Inc.

Enclosure

cc: Thomas Lyle
Megan Rha (w/o encl.)

POSTED
6/30/00

**BEFORE THE
TENNESSEE REGULATORY AUTHORITY**

REC'D TN
REGULATORY AUTH.

'00 JUN 30 PM 2 03

OFFICE OF THE
EXECUTIVE SECRETARY

In the Matter of the Application of)
)
Vitts Networks, Inc.)
)
for a Certificate of Convenience and)
Necessity to Provide Facilities-Based and)
Resold Local Exchange and Interexchange)
Telecommunications Services)
Throughout the State of Tennessee)

Docket No. 00-00561

APPLICATION

Vitts Networks, Inc. ("Vitts" or "Applicant"), by its undersigned counsel and pursuant to the provisions of T.C.A. §§ 65-4-201, Administrative Rules Chapter 1220-4-8, and the Federal Telecommunications Act of 1996 ("Federal Act" or "Act"), 47 U.S.C. § 251 *et seq.*, hereby applies for a Certificate of Convenience and Necessity to provide all forms of facilities-based and resold local exchange and interexchange telecommunications services throughout the State of Tennessee. In support of its application, Vitts provides the following information in compliance with Administrative Rule 1220-4-8-.04.

I. Description of the Applicant

1. 1220-4-8-.04(1)(c). Applicant's legal name is Vitts Networks, Inc. Applicant maintains its principal place of business at:

Vitts Networks, Inc.
77 Sundial Avenue
Manchester, NH 03103
Telephone: (603) 656-8000
Facsimile: (603) 656-8100

2. Correspondence or communications pertaining to this application should be directed to:

Eric J. Branfman, Esq.
D. Anthony Mastando, Esq.
Swidler Berlin Shereff Friedman, LLP
3000 K Street, NW, Suite 300
Washington, DC 20007-5116
Telephone: (202) 424-7500
Facsimile: (202) 424-7643

Correspondence or communications regarding Vitts' ongoing operations should be directed to:

James Atkins, Vice President of Network Operations
Vitts Networks, Inc.
77 Sundial Avenue
Manchester, NH 03103
Telephone: (603) 656-8000
Facsimile: (603) 656-8100

and

Thomas Lyle, Regulatory Affairs Manager
Vitts Networks, Inc.
77 Sundial Avenue
Manchester, NH 03103
Telephone: (603) 656-8000
Facsimile: (603) 656-8100

3. 1220-4-8-.04(1)(e). Vitts, a corporation organized under the laws of Delaware, is a wholly-owned subsidiary of Vitts Networks Group, Inc. A copy of Vitts' Articles of Incorporation and a copy of its Certificate of Authority to transact business in Tennessee are attached as Exhibit 1.

4. 1220-4-8-.04(1)(c). The officers of Vitts are as follows:

Chris Oliver	Chief Executive Officer
Gregory DeMund	President and Chief Operations Officer
William Marshall	Chief Financial Officer and Treasurer
Philip A. Gardella, Jr.	Vice President of Finance
Robert MacPherson	Vice President of Direct Sales
Richard O'Connell	Vice President of Channel Sales
Jim Atkins	Vice President of Network Operations
Karen Lloyd	Vice President of Marketing
Bruce Dyke	Vice President of Support and Data Services

Vitts' officers may be reached at the following address:

Vitts Networks, Inc.
77 Sundial Avenue
Manchester, NH 03103
Telephone: (603) 656-8000
Facsimile: (603) 656-8100

5. 1220-4-8-.04(1)(d). Vitts does not currently have any corporate offices or officers located in Tennessee. The name and address of Vitts' registered agent Tennessee is:

CT Corporation System
530 Gay Street
Knoxville, TN 37902

II. Qualifications

A. Managerial and Technical Qualifications (1220-4-8-.04(b);1220-4-8-.04(1)(g))

1. Vitts has the managerial and technical qualifications to provide the proposed telecommunications services in Tennessee. Vitts' management team has considerable experience in marketing, network operations, financial analysis/accounting, customer service, training, sales, regulatory, and other relevant areas. Attached at Exhibit 2 is a description of the telecommunications experience and expertise of Vitts' key management personnel. As the resumes of Vitts' key personnel reflect, these individuals have substantial experience in running major telecommunications operations. Each member of Vitts' management team will draw upon his or her own experience, as well as the collective experience of the entire management team, to ensure that Vitts is managed and operated efficiently and profitably.

Vitts also employs an outstanding team of engineers and network specialists. Collectively, its senior technical managers have designed, managed, and/or operated advanced telecommunications facilities in the United States. Exhibit 2 describes the technical competence of Vitts' personnel in greater detail.

2. 1220-4-8-.04(1)(g). Vitts currently provides telecommunications and data services in New Hampshire, Maine, Massachusetts, Rhode Island and Vermont. Vitts is also authorized to provide telecommunications services in Connecticut, Delaware, the District of Columbia, Maryland, New Jersey, New York, Pennsylvania, and West Virginia. Vitts is in the process of

applying for authority to provide telecommunications and data services in the States of Georgia, Illinois, Indiana, Ohio, South Carolina and Wisconsin. Also, because of the requirements of Virginia laws and rules, Vitts Networks of Virginia, LLC ("Vitts-VA") was created as a subsidiary and Vitts-VA's application for authority to provide telecommunications service in the Commonwealth of Virginia is currently pending. Vitts will be the sole member and the sole manager of Vitts-VA. Vitts has not been denied the authority to provide telecommunications services in any jurisdiction nor has it had a certificate revoked or suspended in any jurisdiction.

B. Financial Qualifications (1220-4-8-.04(b))

1. Vitts has adequate financial resources to provide facilities-based and resold local exchange services in Tennessee. In particular, Vitts has access to the financing and working capital necessary to fulfill any obligations it may undertake with respect to operation and maintenance of the requested service. Vitts will rely on the financial resources of its parent company, Vitts Networks Group, Inc. In support of Vitts' application, Vitts has filed under seal as Exhibit 3 a copy of the most recent audited financial statements for Vitts' corporate parent, Vitts Networks Group, Inc. (Vitts Networks Group, Inc. is a privately-held corporation and does not issue an SEC Form 10-K or stockholder report.) This exhibit is offered to demonstrate Applicant's financial ability to provide the proposed service. These audited financial statements contain confidential and proprietary information not generally available to the public. Vitts, therefore, is submitting this information in a separate sealed envelope and respectfully requests that it be given confidential treatment and that it not be made a part of the public record or otherwise be made available for public disclosure.

2. None of the financial statements submitted reflect any amounts related to reciprocal compensation for terminating Internet service provider (ISP) traffic.

3. Attached as Exhibit 4 in a sealed envelope are the projected financial statements for the next three years. These projected financial statements contain confidential and proprietary information not generally available to the public. Votts, therefore, is submitting this information in a separate sealed envelope and respectfully requests that it be given confidential treatment and that it not be made a part of the public record or otherwise be made available for public disclosure.

4. Attached as Exhibit 5 in a sealed envelope is the Capital Expenditure Budget for three years. The Capital Expenditure Budget contains confidential and proprietary information not generally available to the public. Votts, therefore, is submitting this information in a separate sealed envelope and respectfully requests that it be given confidential treatment and that it not be made a part of the public record or otherwise be made available for public disclosure.

5. Cost of the proposed network, switches, or unbundled network elements (UNEs).

Exhibit 6 (provided under seal) summarizes Votts' estimated costs of Tennessee facilities. This information contains confidential and proprietary information not generally available to the public. Votts, therefore, is submitting this information in a separate sealed envelope and respectfully requests that it be given confidential treatment and that it not be made a part of the public record or otherwise be made available for public disclosure.

III. Proposed Services (1220-4-8-.04(1)(i))

1. Votts seeks authority to provide all forms of local telecommunications services throughout the State of Tennessee. Applicant plans to offer telecommunications services to business customers located in Tennessee. Votts' services will be available on a full-time basis, 24 hours a day, seven days a week. Initially, Votts plans to provide dedicated, non-switched telecommunications services on a facilities and/or resale basis for local and interexchange traffic throughout the State of Tennessee. Votts will provide dedicated inbound and outbound data transport services to customers. Data transport service is a dedicated point-to-point service offered at the DS-1 (1.54 megabit) or DS-3 (45 megabit) level. The services offered by Votts will be packet-switched and will not rely on the circuit switching of the incumbent local

exchange carrier ("ILEC"). Vits intends to provide service on a statewide basis through its own network facilities, including facilities collocated in the central offices of ILECs, through unbundled network elements purchased from ILECs and through the resale of ILEC services. Applicant does not currently own any telecommunications facilities in the State of Tennessee. Vits plans to provide high-speed Internet access over IP/ATM Packet switches, xDSL compatible loops and IOF.

2. Vits initially plans to serve all Tennessee service areas that are currently being served by BellSouth Telecommunications, Inc. ("BellSouth").

3. Vits is in the process of negotiating interconnection agreements with BellSouth, so that it may commence its proposed Tennessee operations upon certification and Tennessee Regulatory Authority's approval of the interconnection agreements.

4. Vits' Tennessee customers will be required to purchase data Customer Provided Equipment ("CPE") that is incompatible for use with an incumbent carrier.

IV. Description of Operations and Regulatory Compliance

1. 1220-4-8-.04(1)(a). Vits will adhere to all applicable Tennessee Regulatory Authority ("TRA") rules, policies and orders governing the provision of local exchange and interexchange telecommunications services in the State of Tennessee.

2. Vits' customer service representatives will handle customer service inquiries via Vits' toll free number, (888) 656-1800, 24 hours per day, 7 days per week. Vits' toll free number will be printed on its customers' monthly billing statements. The name, address and phone number of Vits' customer service contact is:

Thomas Lyle, Regulatory Affairs Manager
Vits Networks, Inc.
77 Sundial Avenue
Manchester, NH 03103
Telephone: (603) 656-8000
Facsimile: (603) 656-8100

3. 1220-4-8-.04(1)(f). Vits will handle repair and maintenance in Tennessee as follows. Vits' customers may call toll free, (888) 656-1800, to report service problems

requiring repair or maintenance. Votts will respond to repair and maintenance calls promptly and, where necessary, dispatch a service technician as soon as possible. Because customer satisfaction is extremely important to Votts and to its success in the competitive marketplace, all commercially reasonable efforts will be made to address and resolve customer concerns as quickly as possible. The name, address and telephone number of the contact person responsible for and knowledgeable about the provider's Tennessee operations are as follows:

Bruce Dyke, Vice President of Support and Data Services
Votts Networks, Inc.
77 Sundial Avenue
Manchester, NH 03103
Telephone: (603) 656-8000
Facsimile: (603) 656-8100

4. Votts' customer complaint procedures, termination policy and late charge policy are outlined in its illustrative tariff attached hereto at Exhibit 7.
5. At this time, Votts does not plan to require deposits from its customers.
6. Votts will file its final tariff subsequent to approval of its application and prior to providing service in Tennessee.
7. To the extent Votts offers presubscription services in the future, Votts will establish internal sales and management procedures to verify that customers have affirmatively selected Votts as their service provider. Votts' internal policies regarding changes of local and long distance carriers will be consistent with applicable Federal Communication Commission ("FCC") telemarketing and carrier change rules, and will comply with any applicable Tennessee policies, rules and orders governing such carrier changes.
8. Initially, Votts does not plan to provide voice grade services. As such, a toll dialing parity plan is inapplicable to the services Votts initially plans to offer in Tennessee. However, at such time that Votts begins to provide voice grade services, Votts will file a toll dialing parity plan for TRA consideration at least 60 days prior to offering voice grade service.
9. Votts intends to comply with T.C.A. §65-4-201.

10. A copy of Vitts' Small and Minority-Owned Telecommunications Business Participation Plan is attached hereto as Exhibit 8.

11. A certificate of service stating that notice of the application has been served on all eighteen (18) incumbent local exchange telephone companies in Tennessee is attached hereto.

VI. NUMBERING ISSUES

1. Since Vitts will be initially providing data transport services only and will not be requesting NXXs, the numbering issues are inapplicable to Vitts at this point. At such time as Vitts decides to use NXXs, it will provide the pertinent information.

VII. TENNESSEE SPECIFIC OPERATIONAL AND MISCELLANEOUS ISSUES

1. Since Vitts will be initially offering only data transport services, it will not be billing for countywide calls within Tennessee. In addition, Tennessee County Wide Calling database maintained by BellSouth is not applicable to the services Vitts initially intends to provide in Tennessee.

2. Vitts is aware of the local calling areas provided by the Incumbent Local Exchange Carriers in their proposed service areas.

3. Since Vitts will be providing only data transport services initially, no procedures need to be implemented to assure that its customers will not be billed long distance charges for calls within the metro calling areas.

4. The name and telephone number of an employee of Vitts who will be responsible to work with the TRA on resolving customer complaints are listed in Paragraph 2, Section 4.

5. Vitts will employ inside telemarketers to telemarket its services in Tennessee. However, because a network termination device must be deployed at the customer's premise, there is no possibility of "slamming" the customers. Vitts is aware of the telemarketing statutes and regulations found in TCA § 65-4-401 *et seq.* and TRA Rule Chapter 1220-4-11.

6. There are no complaints filed with state or federal regulatory agencies involving Vitts or affiliated entities.

7. Votts does not plan to offer services, at this time, in areas served by any incumbent local exchange telephone company with fewer than 100,000 total access lines.

8. Votts' pre-filed testimony describing the services it plans to provide and summarizing its technical, managerial, and financial qualifications is attached hereto as Exhibit 9.

VIII. PUBLIC INTEREST

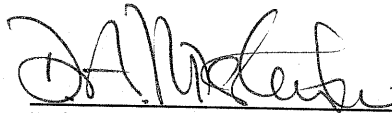
1. Grant of the Application will further the goals of the Tennessee Legislature and further the public interest by expanding the availability of competitive telecommunications services in the State of Tennessee. In addition, intrastate offering of these services is in the public interest because the services will provide Tennessee customers increased efficiencies and cost savings. Authorizing Votts to provide local exchange and interexchange telecommunications services will enhance materially the telecommunications infrastructure in the State of Tennessee and will facilitate economic development.

2. In particular, the public will benefit both directly, through the use of the competitive services to be offered by Votts, and indirectly, because Votts' presence in Tennessee will increase the incentives for other telecommunications providers to operate more efficiently, offer more innovative services, reduce their prices, and improve their quality of service. Grant of this Application will further enhance the service options available to Tennessee citizens for the reasons set forth above.

IX. CONCLUSION

Vitts Networks, Inc. respectfully requests that the Tennessee Regulatory Authority enter an order granting: (1) Vitts a Certificate of Public Convenience and Necessity to provide all forms of facilities-based and resold local exchange and interexchange telecommunications services throughout the State of Tennessee, (2) its request for confidential treatment of the information provided as Exhibits 3-6, and (3) any other appropriate relief. For the reasons stated above, Vitts' provision of these services would promote the public interest by providing high-quality service at competitive prices and by creating greater economic incentives for the development and improvement for all competing providers.

Respectfully submitted,



Eric J. Branfman

D. Anthony Mastando

SWIDLER BERLIN SHEREFF FRIEDMAN, LLP

3000 K Street, NW, Suite 300

Washington, DC 20007-5116

Telephone: (202) 424-7500

Facsimile: (202) 424-7643

Counsel for Vitts Networks, Inc.

Dated: June 29, 2000

EXHIBITS

Exhibit 1	Articles of Incorporation and Certificate of Authority to Transact Business in Tennessee
Exhibit 2	Managerial and Technical Qualifications
Exhibit 3	Most Recent Audited Financial Statements (Submitted Under Seal)
Exhibit 4	Projected Financials (Submitted Under Seal)
Exhibit 5	Capital Expenditure Budget (Submitted Under Seal)
Exhibit 6	Cost of the Proposed Network (Submitted Under Seal)
Exhibit 7	Illustrative Tariff
Exhibit 8	Small and Minority-Owned Telecommunications Business Participation Plan
Exhibit 9	Sworn Pre-filed Testimony of Thomas Lyle
Verification	
Certificate of Service	

EXHIBIT 1

**Articles of Incorporation
and
Certificate of Authority to Transact Business in Tennessee**

Secretary of State

Corporations Section

James K. Polk Building, Suite 1800

Nashville, Tennessee 37243-0306

DATE: 06/08/00

REQUEST NUMBER: 3920-2577

TELEPHONE CONTACT: (615) 741-2286

FILE DATE/TIME: 06/08/00 1225

EFFECTIVE DATE/TIME: 06/08/00 1225

CONTROL NUMBER: 0390777

TO:
C T CORP SYSTEM
2 OLIVER ST

BOSTON, MA 02110

RE:
VITTS NETWORKS, INC.
APPLICATION FOR CERTIFICATE OF AUTHORITY -
FOR PROFIT

WELCOME TO THE STATE OF TENNESSEE. THE ATTACHED CERTIFICATE OF
AUTHORITY HAS BEEN FILED WITH AN EFFECTIVE DATE AS INDICATED ABOVE.

A CORPORATION ANNUAL REPORT MUST BE FILED WITH THE SECRETARY OF STATE
ON OR BEFORE THE FIRST DATE OF THE FOURTH MONTH FOLLOWING THE CLOSE OF THE
CORPORATION'S FISCAL YEAR. PLEASE PROVIDE THIS OFFICE WITH WRITTEN
NOTIFICATION OF THE CORPORATION'S FISCAL YEAR. THIS OFFICE WILL MAIL THE
REPORT DURING THE LAST MONTH OF SAID FISCAL YEAR TO THE CORPORATION AT THE
ADDRESS OF ITS PRINCIPAL OFFICE OR TO A MAILING ADDRESS PROVIDED TO THIS
OFFICE IN WRITING. FAILURE TO FILE THIS REPORT OR TO MAINTAIN A REGISTERED
AGENT AND OFFICE WILL SUBJECT THE CORPORATION TO ADMINISTRATIVE REVOCATION
OF ITS CERTIFICATE OF AUTHORITY.

WHEN CORRESPONDING WITH THIS OFFICE OR SUBMITTING DOCUMENTS FOR
FILING, PLEASE REFER TO THE CORPORATION CONTROL NUMBER GIVEN ABOVE.

FOR: APPLICATION FOR CERTIFICATE OF AUTHORITY -
FOR PROFIT

ON DATE: 06/08/00

FROM:
C T CORPORATION SYSTEM (BOSTON, MA.)
2 OLIVER STREET

BOSTON, MA 02109-0000

	FEE	
RECEIVED:	\$600.00	\$0.00
TOTAL PAYMENT RECEIVED:		\$600.00

RECEIPT NUMBER: 00002697936
ACCOUNT NUMBER: 00000012



SS-4458

Riley C. Darnell

RILEY C. DARNELL
SECRETARY OF STATE

State of Delaware
Office of the Secretary of State

PAGE 1

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED ARE TRUE AND CORRECT COPIES OF ALL DOCUMENTS FILED FROM AND INCLUDING THE RESTATED CERTIFICATE OF "VITTS NETWORKS, INC." AS RECEIVED AND FILED IN THIS OFFICE.

THE FOLLOWING DOCUMENTS HAVE BEEN CERTIFIED:

RESTATED CERTIFICATE, FILED THE TWENTY-FIFTH DAY OF JUNE, A.D. 1999, AT 1:30 O'CLOCK P.M.



2654103 8100X

001026352

A handwritten signature in cursive script, reading "Edward J. Freel".

Edward J. Freel, Secretary of State

AUTHENTICATION: 0205122

DATE: 01-18-00

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION**OF****VITTS NETWORKS, INC.**

Vitts Networks, Inc., a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify:

1. The original Certificate of Incorporation was filed with the Secretary of State on August 19, 1996, under the name of Vitts Corporation.

2. The following Amended and Restated Certificate of Incorporation was duly proposed by the corporation's Board of Directors pursuant to the applicable provisions of Section 242 and Section 245 of the General Corporation Law of the State of Delaware. In lieu of a meeting of the stockholders, written consent has been given for the adoption of said Amended and Restated Certificate of Incorporation and the amendments to be made thereby pursuant to the applicable provisions of Sections 242 and 245 of the General Corporation Law of the State of Delaware.

FIRST: The name of the corporation (hereinafter called the "Corporation") is Vitts Networks, Inc.

SECOND: The address of the registered office of the Corporation in the State of Delaware is 1013 Centre Road, Wilmington, County of New Castle, Delaware 19805, and the name of the registered agent of the Corporation in the State of Delaware at such address is Corporation Service Company.

THIRD: The purpose of the Corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware (the "Delaware General Corporation Law").

FOURTH: At the time of filing of this Amended and Restated Certificate of Incorporation (the "Certificate of Incorporation") with the Secretary of State of Delaware, the following action shall take effect: each of the 1,200,000 shares of Common Stock issued and outstanding prior to the date of filing of this Amended and Restated Certificate of Incorporation shall be subdivided into an aggregate of 4,800,000 shares of Common Stock, to effect a 4-to-1 stock split of the issued and outstanding Common Stock, and all outstanding options, warrants or other rights to purchase or acquire Common Stock shall be appropriately adjusted for such 4:1 stock split. All numbers herein reflect the 4:1 stock split.

The Corporation is authorized to issue two classes of shares of capital stock to be designated respectively Preferred Stock ("Preferred Stock") and Common Stock ("Common Stock"). The total number of shares of capital stock that the Corporation is authorized to issue is 100,000,000 shares of capital stock. The total number of shares of Preferred Stock that the

Corporation is authorized to issue is 25,000,000 of Preferred stock. The total number of shares of Common Stock that the Corporation is authorized to issue is 75,000,000 of Common Stock. The Preferred Stock and the Common Stock each shall have a par value of \$0.01 per share.

Subject to Section 6 of Part C of this Article Fourth, but notwithstanding the provisions of Section 242(b)(2) of the General Corporation Law of the State of Delaware, the holders of Common Stock shall vote together with the holders of the Preferred Stock as a single class with respect to any proposed amendment hereto that would increase the number of authorized shares of Common Stock or Preferred Stock, with each such share being entitled to such number of votes per share as is provided in this Article Fourth, and the holders of the Common Stock and the Preferred Stock shall not be entitled to separate class votes with respect thereto.

A. Common Stock.

1. **Relative Rights of Preferred Stock and Common Stock.** All preferences, voting powers, relative, participating, optional or other special rights and privileges, and qualifications, limitations, or restrictions of the Common Stock are expressly made subject and subordinate to those that may be fixed with respect to any shares of any series of the Preferred Stock.

2. **Voting Rights.** Except as otherwise required by law or the Certificate of Incorporation, each holder of Common Stock shall have one vote in respect of each share of stock held by such stockholder of record on the books of the Corporation for the election of directors and on all matters submitted to a vote of stockholders of the Corporation. Except as otherwise set forth in this Amended and Restated Certificate of Incorporation, any amendment or restatement thereof, or in any Certificate of Designation filed in accordance with the General Corporation Law of the State of Delaware with respect to the designation of any series of Preferred Stock, the holders of Common Stock and Preferred Stock shall vote together (or render written consents in lieu of a vote) as a single class on all matters submitted to the stockholders for a vote.

3. **Dividends.** Subject to the preferential rights of the Preferred Stock, if any, the holders of shares of Common Stock shall be entitled to receive, when, as and if declared by the Board of Directors of the Corporation, out of the assets of the Corporation which are by law available therefor, dividends payable either in cash, in property or in shares of capital stock.

4. **Dissolution, Liquidation or Winding Up.** In the event of any dissolution, liquidation or winding up of the affairs of the Corporation, after distribution in full of the preferential amounts, if any, to be distributed to the holders of shares of the Preferred Stock, the holders of Common Stock shall be entitled to receive all of the remaining assets of the Corporation of whatever kind available for distribution to stockholders ratably in proportion to the number of shares of Common Stock held by them respectively, unless otherwise provided by law or the Certificate of Incorporation, any amendment or restatement thereof, or in any Certificate of Designation filed in accordance with the General Corporation Law of the State of Delaware with respect to the designation of any series of Preferred Stock.

B. Preferred Stock.

The Preferred Stock shall be divided into series. The first series shall consist of 4,403,540 shares and be designated "Series A Preferred Stock."

Subject to the limitations prescribed by law and the provisions of the Certificate of Incorporation, as amended from time to time, the remaining shares of Preferred Stock may be issued from time to time in one or more series and the Board of Directors of the Corporation (the "Board of Directors") is expressly authorized to provide for the issuance of all or any of the remaining shares of the Preferred Stock in one or more series, and to fix the number of shares and to determine or alter, for each such series, such voting powers, full or limited, or no voting powers, and such designations, preferences, and relative, participating, optional, or other rights and such qualifications, limitations, or restrictions thereof, as shall be stated and expressed in the resolution or resolutions adopted by the Board of Directors providing for the issue of such shares (a "Preferred Stock Designation") and as may be permitted by the Delaware General Corporation Law. Subject to the limitations prescribed by law and the provisions of the Certificate of Incorporation, as amended from time to time, the Board of Directors is also expressly authorized to increase or decrease (but not below the number of shares of such series then outstanding) the number of shares of any series other than the Series A Preferred Stock subsequent to the issue of shares of that series. In case the number of shares of any such series shall be so decreased, the shares constituting such decrease shall resume the status that they had prior to the adoption of the resolution originally fixing the number of shares of such series. The Board of Directors of the Corporation is expressly authorized by a vote of all of the members of the Board of Directors then in office, subject to the limitations prescribed by law and the provisions of the Certificate of Incorporation, as amended from time to time, to provide by adopting a vote or votes, a certificate of which shall be filed in accordance with the General Corporation Law of the State of Delaware, for the issue of the Preferred Stock or one or more classes or series, each with the designations, rights and privileges that shall be stated in the vote or votes creating such classes or series. The authority of the Board of Directors of the Corporation with respect to each such class or series of Preferred Stock shall include, without limitation of the foregoing, the right to determine and fix:

1. The distinctive designation of such class or series and the number of shares to constitute such class or series;
2. The rate at which dividends on the shares of such class or series shall be declared and paid, or set aside for payment, whether dividends at the rate so determined shall be cumulative, and whether the shares of such class or series shall be entitled to any participating or other dividends in addition to dividends at the rate so determined, and if so on what terms;
3. The right, if any, of the Corporation to redeem shares of the particular class or series and, if redeemable, the price, terms and manner of such redemption;
4. The special and relative rights and preferences, if any, and the amount or amounts per share, which the shares of such class or series shall be entitled to receive upon any voluntary or involuntary liquidation, dissolution or winding up of the Corporation;

5. The terms and conditions, if any, upon which shares of such class or series shall be convertible into, or exchangeable for, shares of stock, or any other class or classes, including the price or prices or the rate or rates of conversion or exchange and the terms of adjustment, if any;

6. The obligation, if any, of the Corporation to retire or purchase shares of such class or series pursuant to a sinking fund or fund of a similar nature or otherwise, and the terms and conditions of such obligation;

7. Voting rights, if any, including special voting rights with respect to the election of directors and matters adversely affecting any such class or series;

8. Limitations, if any, on the issuance of additional shares of such class or series or any shares of any other class or series of Preferred Stock; and

9. Any other preferences, powers, qualifications, special or relative rights and privileges thereof that the Board of Directors of the Corporation may deem advisable and that are not inconsistent with law and the provisions of the Certificate of Incorporation.

C. The powers, preferences, rights, restrictions, and other matters relating to the Series A Preferred Stock are as follows:

1. Dividends.

a. The holders of the Series A Preferred Stock shall be entitled to receive cumulative dividends at the rate of \$0.40878 per share per annum (as adjusted for any stock dividends, combinations, splits or similar events) whether or not earned or declared. Any accumulated dividends shall bear interest at the rate of 9.0% compounded annually. Such dividends and interest thereon shall be payable in cash (i) when, as, and if declared by the Board of Directors, or (ii) upon conversion of all of the Series A Preferred Stock to Common Stock pursuant to Section C.5. below (the "Preferred Stock Conversion"). Notwithstanding the foregoing, no dividends (and no interest thereon) shall be payable upon the Preferred Stock Conversion if such Preferred Stock Conversion occurs on or prior to June 30, 2002.

b. No dividends or distributions of any sort (other than a dividend payable solely in the Common Stock of the Corporation) shall be paid on any Common Stock of the Corporation so long as any shares of Series A Preferred Stock remain outstanding. All numbers relating to calculation of cumulative dividends shall be subject to equitable adjustment in the event of any stock dividend, stock split, combination, reorganization, recapitalization, reclassification or other similar event involving a change in the capital structure of the Series A Preferred Stock.

2. Liquidation Preference.

a. In the event of any liquidation, dissolution or winding up of the Corporation, whether voluntary or involuntary, the holders of the Series A Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the assets or surplus

funds of the Corporation to the holders of the Common Stock or other series of Preferred Stock by reason of their ownership thereof, the amount equal to \$4.542 (as adjusted for any stock dividends, combinations, splits or similar events) plus all accrued but unpaid dividends and interest thereon (the "Liquidation Amount") for each share of Series A Preferred Stock then held by them. If upon the occurrence of such event, the assets and funds thus distributed among the holders of the Series A Preferred Stock shall be insufficient to permit the payment to such holders of the full Liquidation Amount, then the entire assets and funds of the Corporation legally available for distribution shall be distributed ratably among the holders of the Series A Preferred Stock in proportion to the aggregate Liquidation Amount each such holder is otherwise entitled to receive. The holders of Series A Preferred Stock shall have the right to convert such shares into Common Stock, in accordance with Section 5 hereof, at any time prior to or in connection with any liquidation, dissolution or winding up of the Corporation.

b. After payment to the holders of the Series A Preferred Stock of the amounts set forth in Section C.2.a. above, the entire remaining assets and funds of the Corporation legally available for distribution, if any, shall be distributed among the holders of the Common Stock in proportion to the shares of Common Stock then held by them.

c. For purposes of this Section C.2, upon the written consent or written agreement of holders of at least a majority of the shares of Series A Preferred Stock then outstanding, (i) any acquisition of the Corporation by means of merger or other form of corporate reorganization in which outstanding shares of the Corporation are exchanged for securities or other consideration issued or paid, or caused to be issued or paid, by the acquiring entity or its subsidiary (other than a mere reincorporation transaction) or (ii) a sale, lease or conveyance of all or substantially all of the assets of the Corporation (upon such written consent or written agreement, each event described in (i) and (ii), a "Corporate Transaction"), shall be treated as a liquidation, dissolution or winding up of the Corporation and shall entitle the holders of Series A Preferred Stock to receive at the closing of such Corporate Transaction in cash, securities or other property (valued as provided in Section C.2.d. below) amounts as specified in Section C.2.a. above. The provisions of this Section 2 shall not apply to any reorganization, merger or consolidation involving (1) only a change in the state of incorporation of the Corporation, (2) a merger of the Corporation with or into a wholly-owned subsidiary of the Corporation that is incorporated in the United States of America, or (3) an acquisition by merger, reorganization or consolidation, of which the Corporation is substantively the surviving corporation and operates as a going concern and is not the target in any such acquisition, of another corporation that is approved by the Board of Directors of the Corporation with a majority of the Series A Directors concurring and which does not involve a recapitalization of the Series A Preferred Stock.

d. Whenever the distribution provided for in this Section C.2 shall be payable in securities or property other than cash, the value of such distribution shall be the fair market value of such securities or other property as determined in good faith by the Board of Directors. The Liquidation Amount shall in all events be paid in cash; provided, however, that if the Liquidation Amount is otherwise payable in connection with a consolidation or merger of the Corporation, or sale of substantially all of the capital stock of the Corporation, then each holder of the Series A Preferred Stock shall receive payments with respect to the Series A Preferred Stock in the same form of consideration as is payable with respect to the Common Stock. In the

event of any business combination or acquisition involving the Corporation which is intended to be treated as a "pooling of interests" for accounting purposes under Accounting Principles Board Opinion No. 16, the acquisition consideration (including any shares of capital stock or other securities to be delivered or exchanged by the acquiring corporation) shall be reallocated among the holders of Series A Preferred Stock in an appropriate manner to give economic effect to the essential intent and purposes of Section 2(a) and (c).

3. Redemption.

a. At any time after June 30, 2004, the holders of a majority of the outstanding shares of Series A Preferred Stock shall have the option to require the Corporation to redeem (a "Mandatory Redemption") all, but not less than all, of the Series A Preferred Stock held by such holders at a price per share of Series A Preferred Stock equal to the greater of (i) the Liquidation Amount or (ii) an amount equal to the fair market value per share of Series A Preferred Stock, such value to be determined by an independent appraisal (the "Appraisal"), exclusive of liquidity or minority ownership discounts, performed by an independent third party mutually agreeable to such holder and the Corporation. The expense of the Appraisal shall be borne equally by the Corporation and the redeeming holder. A holder of shares of Series A Preferred Stock may require the Corporation to make a Mandatory Redemption by giving written notice (the "Redemption Notice") to the Corporation of such election. Upon the later of (i) 45 days after receipt of such Redemption Notice, or (ii) 10 days after the Appraisal is complete (the "Mandatory Redemption Date"), the Corporation (and such holder) will be obligated to redeem, to the extent it may lawfully do so, all of such holder's Series A Preferred Stock.

b. To the extent legally permissible, amounts to be paid pursuant to any Mandatory Redemption shall be paid in cash to the extent of 50% of aggregate cash provided by operating activities of the Corporation (as determined in accordance with generally accepted accounting principles) for the four fiscal quarters immediately preceding the fiscal quarter in which the applicable Redemption Notice is received by the Corporation and the balance shall be paid in the form of a two year promissory note payable in equal quarterly installments and bearing simple interest of 8% per annum. Any amounts due and unpaid under such promissory note shall thereafter bear simple interest at 14% per annum. Notwithstanding anything herein to the contrary, in no event shall such interest exceed the maximum rate allowable under applicable law.

c. If the funds of the Corporation legally available for redemption of Series A Preferred Stock on any Mandatory Redemption Date and specified in Section C.3.b. above are insufficient to redeem the total number of shares of Series A Preferred Stock to be redeemed on such Mandatory Redemption Date, those funds that are legally available shall be used to redeem the maximum possible number of shares of Series A Preferred Stock ratably among the holders of such shares to be redeemed on the basis of the redemption amounts due with respect to the shares held by each such holder. At any time and from time to time thereafter when additional funds of the Corporation are legally available for redemption of shares of Series A Preferred Stock such funds shall be used to immediately redeem, in accordance with Section C.3.b. above, the balance of the shares which the Corporation has become obligated to redeem on any Mandatory Redemption Date but which it has not redeemed. Such shares shall be

redeemed ratably among the holders of such shares to be redeemed on the basis of the redemption amounts due with respect to the balance of the shares held by each such holder which the Corporation became obligated to redeem on such Mandatory Redemption Date but which have not been redeemed. Such funds shall not be used for any other purpose, including to redeem any shares of Series A Preferred Stock which the Corporation is obligated to redeem on any subsequent date.

d. Notwithstanding anything to the contrary herein or in the Corporation's Bylaws, if the Corporation does not redeem all Series A Preferred Stock to be redeemed on a Mandatory Redemption Date (whether due to lack of legally available funds or otherwise) then during the period from the Mandatory Redemption Date until such Series A Preferred Stock is redeemed (the "Board Control Period"), the Corporation's Board of Directors shall be constituted as follows: The Board of Directors shall consist of seven members. Four directors (the "Series A Directors") shall be elected by a plurality vote of the holders of shares of Series A Preferred Stock, voting as a separate class. Three directors (the "Common Directors") shall be elected by a plurality vote of the shares of Common Stock, voting as a separate class. The holders of a majority of the shares of Series A Preferred Stock may remove Series A Director(s) and appoint new Series A Director(s) to fill any vacancies by written notice delivered to the Corporation. The holders of a majority of the shares of Common Stock may remove Common Director(s) and appoint new Common Director(s) to fill any vacancies by written notice delivered to the Corporation. Vacancies may not be filled in any other manner. Upon termination of the Board Control Period, the most recently elected Series A Director shall resign and the Common Directors may appoint a director to fill the such vacancy.

4. Voting Rights.

a. Each holder of shares of Series A Preferred Stock shall be entitled to the number of votes equal to the number of whole shares of Common Stock into which such shares of Series A Preferred Stock could be converted and shall have voting rights and powers equal to the voting rights and powers of such Common Stock (except as otherwise expressly provided herein, voting together with the Common Stock as a single class) and shall be entitled to notice of any stockholders' meeting in accordance with the Bylaws of the Corporation and the Delaware General Corporation Law. Fractional votes shall not, however, be permitted and any fractional voting rights resulting from the above formula (after aggregating all shares into which shares of Series A Preferred Stock held by each holder could be converted) shall be rounded to the nearest whole number (with one-half being rounded upward). Such determination of "whole shares" shall be based upon the aggregate number of shares of Series A Preferred Stock held by each holder, and not upon each share of Series A Preferred Stock so held by the holder. Each holder of Common Stock shall be entitled to one vote for each share of Common Stock held. Except as otherwise expressly provided in this Amended and Restated Certificate of Incorporation, the holders of shares of Series A Preferred Stock and Common Stock shall vote together (or render written consents in lieu of a vote) as a single class on all matters submitted to the stockholders of the Corporation.

b. Until consummation of a Qualified Public Offering (as defined below) and unless otherwise agreed by the holders of a majority of the Series A Preferred Stock,

the Corporation's Board of Directors shall be constituted as follows: The Board of Directors shall consist of seven members. Three directors (the "Series A Directors") shall be elected by a plurality vote of the holders of shares of Series A Preferred Stock, voting as a separate class. Four directors (the "Common Directors") shall be elected by a plurality vote of the shares of Common Stock, voting as a separate class. The holders of a majority of the shares of Series A Preferred Stock may remove Series A Director(s) and appoint new Series A Director(s) to fill any vacancies by written notice delivered to the Corporation. The holders of a majority of the shares of Common Stock may remove Common Director(s) and appoint new Common Director(s) to fill any vacancies by written notice delivered to the Corporation. Vacancies may not be filled in any other manner. This Section 4.b. shall not be operative during a Board Control Period.

5. Conversion. The holders of the Series A Preferred Stock shall have conversion rights as follows (the "Conversion Rights"):

a. Right to Convert. Each share of Series A Preferred Stock shall be convertible, at the option of the holder thereof, at any time at the office of the Corporation or any transfer agent for such stock, into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing \$4.542 by the Conversion Price applicable to such share, determined as hereinafter provided, in effect on the date the certificate is surrendered for conversion. The Conversion Price at which shares of Common Stock shall be deliverable upon conversion of shares of the Series A Preferred Stock (the "Series A Conversion Price") shall initially be \$4.542 per share of Common Stock. Such initial Series A Conversion Price shall be adjusted as hereinafter provided.

b. Automatic Conversion. Each share of Series A Preferred Stock shall automatically be converted into shares of Common Stock at the then effective Series A Conversion Price upon the earliest of (i) the effectiveness of an underwritten public offering on a firm commitment basis pursuant to an effective registration statement filed pursuant to the Securities Act of 1933, as amended, covering the offer and sale of Common Stock for the account of the Corporation and/or selling stockholders in which the Corporation and/or such stockholders actually receive gross proceeds equal to or greater than \$30,000,000 and at a price per share equal to or greater than \$9.09 (adjusted for any stock split, stock dividend, combination or similar event involving a change in the Common Stock), or (ii) the date specified by written consent or written agreement of holders of at least two-thirds of the shares of Series A Preferred Stock then outstanding. The automatic conversion of the Series A Preferred Stock into shares of Common Stock as provided in clause (i) above upon the effectiveness of the registration statement shall be subject in all circumstances to the closing and consummation of the offer and sale of shares of Common Stock pursuant to any public offering satisfying the requirements of clause (i) above.

c. Mechanics of Conversion.

(i) Before any holder of Series A Preferred Stock shall be entitled to convert the same into shares of Common Stock, he shall surrender the certificate or certificates therefor, duly endorsed, at the office of the Corporation or of any transfer agent for such stock, and shall give written notice to the Corporation at such office that he elects to convert

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the same and shall state therein the name or names in which he wishes the certificate or certificates for shares of Common Stock to be issued. The Corporation shall, as soon as practicable thereafter, issue and deliver at such office to such holder of Series A Preferred Stock, a certificate or certificates for the number of shares of Common Stock to which he shall be entitled as aforesaid. Such conversion shall be deemed to have been made immediately prior to the close of business on the date of surrender of the shares of Series A Preferred Stock to be converted, and the person or persons entitled to receive the shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder or holders of such shares of Common Stock on such date. Upon the occurrence of the conversion events specified in the preceding paragraph (i), the holders of the Series A Preferred Stock shall, upon notice from the Corporation, surrender the certificates representing such shares at the office of the Corporation or of its transfer agent for the Common Stock. Thereupon, there shall be issued and delivered to such holder a certificate or certificates for the number of shares of Common Stock into which the shares of Series A Preferred Stock so surrendered were convertible on the date on which such conversion occurred. The Corporation shall not be obligated to issue such certificates unless certificates evidencing the shares of Series A Preferred Stock being converted are either delivered to the Corporation or any such transfer agent, or the holder notifies the Corporation that such certificates have been lost, stolen or destroyed and executes an agreement reasonably satisfactory to the Corporation to indemnify the Corporation from any loss incurred by it in connection therewith.

(ii) If the conversion is in connection with an underwritten offering of securities pursuant to the Securities Act or other event regarding which notice is provided pursuant to Section C.5.i. (collectively, a "Contingent Event"), the conversion may, at the option of any holder tendering shares of Series A Preferred Stock for conversion, be conditioned upon the closing with the underwriters of the sale of securities pursuant to such offering or the occurrence of such Contingent Event, in which event the person(s) entitled to receive the Common Stock upon conversion of the Series A Preferred Stock shall not be deemed to have converted such Series A Preferred Stock until immediately prior to the closing of such sale of securities or Contingent Event.

d. Adjustments to Series A Conversion Price for Certain Diluting Issues.

(i) Special Definitions. For purposes of this Section C.5.d., the following definitions apply:

(1) "Options" shall mean rights, options, or warrants to subscribe for, purchase or otherwise acquire either Common Stock or Convertible Securities (defined below).

(2) "Original Issue Date" shall mean the date on which a share of Series A Preferred Stock was first issued.

(3) "Convertible Securities" shall mean any evidences of indebtedness, shares (other than Common Stock and Series A Preferred Stock) or other securities convertible into or exchangeable for Common Stock.

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(4) "Additional Shares of Common Stock" shall mean all shares of Common Stock issued (or, pursuant to Section C.5.d.(iii), deemed to be issued) by the Corporation after the Original Issue Date, other than shares of Common Stock issued (or deemed issued):

Preferred Stock;

(A) upon conversion of shares of Series A

(B) to directors, officers, employees and consultants pursuant to any incentive or non-qualified stock option plan or agreement, stock purchase plan or agreement, stock issuance or restriction agreement, stock ownership or purchase plan, consulting agreement (the "Employee Stock") provided that the number of shares of Employee Stock does not exceed an aggregate of 2,400,000 shares (as adjusted for any stock dividends, combinations, splits or similar events) regardless of whether issued by the Corporation prior to the date hereof or issuable after the date hereof unless additional Employee Stock is approved by a majority of the members of the Board of Directors with a majority of the Series A Directors concurring;

Preferred Stock;

(C) as a dividend or distribution on Series A

(D) for which adjustment of the Series A Conversion Price is made pursuant to Section C.5.e.;

(E) in connection with corporate partnering transactions, lease lines, bank financings or acquisitions of businesses or intellectual property rights, provided in each such case that such transaction was approved by the Board of Directors, with a majority of the Purchaser Directors concurring; or

(F) a warrant(s) issued to Jeffries & Company, Inc. (or any affiliated entity) for an aggregate amount of up to 320,650 shares of Common Stock.

(ii) No Adjustment of Series A Conversion Price. Any provision herein to the contrary notwithstanding, no adjustment in the Series A Conversion Price shall be made in respect of the issuance of Additional Shares of Common Stock unless the consideration per share (determined pursuant to Section C.5.d.(v) hereof) for an Additional Share of Common Stock issued or deemed to be issued by the Corporation is less than the Series A Conversion Price in effect on the date of, and immediately prior to such issue. In computing each adjusted Series A Conversion Price, the result shall be rounded to five decimal places, and such adjustment shall be made separately in each instance, and in the event the adjustment therefrom results in a change of the Series A Conversion Price of less than \$0.01, no adjustment to the then Series A Conversion Price shall be made, but the amount of said adjustment calculated thereby shall be carried forward to successive occasions until such adjustments in the aggregate equal or exceed \$0.01.

(iii) Deemed Issue of Additional Shares of Common Stock. In the event the Corporation at any time or from time to time after the Original Issue Date shall

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issue any Options or Convertible Securities or shall fix a record date for the determination of holders of any class of securities then entitled to receive any such Options or Convertible Securities, then the maximum number of shares (as set forth in the instrument relating thereto without regard to any provisions contained therein designed to protect against dilution) of Common Stock issuable upon the exercise of such Options or, in the case of Convertible Securities and Options therefor, the conversion or exchange of such Convertible Securities, shall be deemed to be Additional Shares of Common Stock issued as of the time of such issue or, in case such a record date shall have been fixed, as of the close of business on such record date, provided further that in any such case in which Additional Shares of Common Stock are deemed to be issued:

(1) no further adjustments in the Series A Conversion Price shall be made upon the subsequent issue of Convertible Securities or shares of Common Stock upon the exercise of such Options or conversion or exchange of such Convertible Securities;

(2) if such Options or Convertible Securities by their terms provide, with the passage of time or otherwise, for any increase in the consideration payable to the Corporation, or decrease in the number of shares of Common Stock issuable, upon the exercise, conversion or exchange thereof, the Series A Conversion Price computed upon the original issue thereof (or upon the occurrence of a record date with respect thereto), and any subsequent adjustments based thereon, shall, upon any such increase or decrease becoming effective, be recomputed to reflect such increase or decrease insofar as it affects such Options or the rights of conversion or exchange under such Convertible Securities (provided, however, that no such adjustment of the Series A Conversion Price shall affect Common Stock previously issued upon conversion of the Series A Preferred Stock);

(3) no readjustment pursuant to clause (1) or (2) above shall have the effect of increasing the Series A Conversion Price to an amount which exceeds the lower of (a) the Series A Conversion Price on the original adjustment date, or (b) the Series A Conversion Price that would have resulted from any issuance of Additional Shares of Common Stock between the original adjustment date and such readjustment date.

(iv) Adjustment of Series A Conversion Price Upon Issuance of Additional Shares of Common Stock. In the event the Corporation, at any time after the Original Issue Date, shall issue Additional Shares of Common Stock (including Additional Shares of Common Stock deemed to be issued pursuant to Section C.5.d.(iii)) without consideration or for a consideration per share less than the Series A Conversion Price in effect on the date of and immediately prior to such issue, then and in such event, the Series A Conversion Price shall be reduced, concurrently with such issue, to a price (calculated to the nearest cent) determined by multiplying the Series A Conversion Price by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of shares of Common Stock which the aggregate consideration received by the Corporation for the total number of Additional Shares of Common Stock so issued would purchase at the Series A Conversion Price in effect immediately prior to such issuance, and the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus

the number of such Additional Shares of Common Stock so issued. For the purpose of the above calculation, the number of shares of Common Stock outstanding immediately prior to such issue shall be calculated on a fully diluted basis, as if all shares of Series A Preferred Stock and all Convertible Securities had been fully converted into shares of Common Stock and any outstanding Options or other Convertible Securities had been fully exercised (and the resulting securities fully converted into shares of Common Stock, if so convertible) as of such date. The provisions of this Section 5d may be waived in any instance (without the necessity of convening any meeting of stockholders of the Corporation) upon the written approval of the holders of a majority of the outstanding shares of Series A Preferred Stock.

(v) Determination of Consideration. For purposes of this Section C.5.d., the consideration received by the Corporation for the issue of any Additional Shares of Common Stock shall be computed as follows:

(1) Cash and Property: Such consideration shall:

(A) insofar as it consists of cash, be computed at the aggregate amount of cash received by the Corporation;

(B) insofar as it consists of property other than cash, be computed at the fair value thereof at the time of such issue, as determined in good faith by the Board of Directors; and

(C) in the event Additional Shares of Common Stock are issued together with other shares or securities or other assets of the Corporation for consideration which covers both, be the proportion of such consideration so received in exchange for the Additional Shares of Common Stock, computed as provided in clauses (A) and (B) above, as determined in good faith by the Board of Directors.

Options and Convertible Securities. The consideration per share received by the Corporation for Additional Shares of Common Stock deemed to have been issued pursuant to Section C.5.d.(iii), relating to Options and Convertible Securities shall be determined by dividing

(D) the total amount, if any, received or receivable by the Corporation as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating thereto, without regard to any provision contained therein designed to protect against dilution) payable to the Corporation upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities by

(E) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein designed to protect against the dilution) issuable upon the exercise of such Options or conversion or exchange of such Convertible Securities.

e. Adjustments to Series A Conversion Price for Stock Dividends and for Combinations or Subdivisions of Common Stock. In the event that the Corporation at any time or from time to time after the Original Issue Date shall effect a (i) subdivision of the outstanding shares of Common Stock into a greater number of shares of Common Stock (by stock dividend, stock split, reclassification or otherwise), or (ii) combination or consolidation of the outstanding shares of Common Stock into a lesser number of shares of Common Stock (by reclassification or otherwise), then the Series A Conversion Price in effect immediately prior to such event shall, concurrently with the effectiveness of such event, be proportionately decreased or increased, as appropriate. In the event that the Corporation shall declare or pay, without consideration, any dividend on the Common Stock payable in Common Stock or in any right to acquire Common Stock for no consideration, then the Corporation shall be deemed to have subdivided the outstanding shares of Common Stock by an amount of shares equal to the maximum number of shares issuable through such dividend and/or upon exercise of such rights to acquire Common Stock.

f. Adjustments to Series A Conversion Price for Reclassification and Reorganization. If the Common Stock issuable upon conversion of the Series A Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than as provided for in Section C.5.e. above or in connection with a Corporate Transaction), the Series A Conversion Price then in effect shall, concurrently with the effectiveness of such reorganization or reclassification, be proportionately adjusted so that the Series A Preferred Stock shall be convertible into, in lieu of the number of shares of Common Stock which the holders would otherwise have been entitled to receive, a number of shares of such other class or classes of stock equivalent to the number of shares of Common Stock that would have been subject to receipt by the holders upon conversion of the Series A Preferred Stock immediately before that change.

g. No Impairment. The Corporation will not, by amendment of its Certificate of Incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed hereunder by the Corporation, but will at all times in good faith assist in the carrying out of all the provisions of this Section C.5 and in the taking of all such action as may be necessary or appropriate in order to protect the Conversion Rights of the holders of the Series A Preferred Stock against impairment.

h. Certificates as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Series A Conversion Price pursuant to this Section C.5, the Corporation at its expense shall promptly compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each holder of Series A Preferred Stock a certificate executed by the Corporation's President or Chief Financial Officer setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, upon the written request at any time of any holder of Series A Preferred Stock, furnish or cause to be furnished to such holder a like certificate setting forth (i) such adjustments and readjustments, (ii) the Series A Conversion Price at the time in effect, and (iii) the number of shares of Common Stock and the amount, if any, of

other property which at the time would be received upon the conversion of the Series A Preferred Stock.

i. Notices of Record Date. In the event that the Corporation shall propose at any time to effect any reclassification or recapitalization, to merge or consolidate with or into any other entity, or sell, lease or convey all or substantially all of its assets, or to liquidate, dissolve or wind up, then, in connection with each such event, the Corporation shall send to the holders of Series A Preferred Stock: (1) at least 20 days prior written notice of the date on which a record shall be taken for such event and specifying the date on which such event shall occur; and (2) at least 20 days prior written notice of the record date for determining rights to vote, if any, in respect of such event.

j. Issue Taxes. The Corporation shall pay any and all issue and other taxes that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of shares of Series A Preferred Stock pursuant hereto; provided, however, that the Corporation shall not be obligated to pay any transfer taxes resulting from any transfer requested by any holder in connection with any such conversion.

k. Reservation of Stock Issuable Upon Conversion. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Series A Preferred Stock, such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of the Series A Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series A Preferred Stock, the Corporation shall take such corporate action as may, in the opinion of its counsel, be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose, including, without limitation, engaging in best efforts to obtain the requisite stockholder approval of any necessary amendment to this Certificate of Incorporation.

l. Fractional Shares. No fractional share shall be issued upon the conversion of any share or shares of Series A Preferred Stock. All shares of Common Stock (including fractions thereof) issuable upon conversion of more than one share of Series A Preferred Stock by a holder thereof shall be aggregated for purposes of determining whether the conversion would result in the issuance of any fractional share. If, after the aforementioned aggregation, the conversion would result in the issuance of a fraction of a share of Common Stock, the Corporation shall, in lieu of issuing any fractional share, pay the holder otherwise entitled to such fraction a sum in cash equal to the fair market value of such fraction on the date of conversion (as determined in good faith by the Board of Directors).

m. Notices. Any notice required by the provisions of this Section C.5 to be given to the holders of shares of Series A Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at his address appearing on the books of the Corporation.

6. Restrictions and Limitations.

a. So long as any shares of Series A Preferred Stock remain outstanding, in addition to any other vote required by the Delaware General Corporation Law, the vote or written consent or written agreement of the holders of at least a majority of the then outstanding shares of the Series A Preferred Stock, voting as a separate class, shall be required in order to:

(vi) alter the rights, preferences or privileges of the Series A Preferred Stock;

(vii) increase the authorized number of shares of the Series A Preferred Stock;

(viii) authorize or issue, or obligate itself to issue, any other equity security (including any security convertible into or exercisable for any equity security) senior to or on a parity with the Series A Preferred Stock as to dividend rights, liquidation preferences or redemption rights; or

(ix) redeem, purchase or otherwise acquire any shares of Common Stock or Preferred Stock (or pay into a sinking fund for such purpose); provided however that this restriction shall not apply to any redemption pursuant to Section C.3 or to the repurchase of shares of Common Stock at the original purchase price from employees, officers, directors or other persons performing services for this Corporation.

b. So long as any shares of Series A Preferred Stock remain outstanding, in addition to any other vote required by the Delaware General Corporation Law, the vote or written consent or written agreement of the holders of at least a majority of the then outstanding shares of the Series A Preferred Stock (on an as converted basis) and Common Stock, voting together as a single class, shall be required in order to merge or consolidate with or into any other entity or sell or convey any substantial portion of the Corporation's assets. Notwithstanding the foregoing and prior to December 31, 2000, if any such merger, consolidation, sale or conveyance would result in holders of Series A Preferred Stock receiving less than \$13.626 per share (as adjusted for any stock dividend, stock split, reclassification or similar events), the vote or written consent or written agreement of the holders of at least a majority of the then outstanding shares of Series A Preferred Stock shall be required in order to effect such transaction.

7. No Reissuance of Series A Preferred Stock. No share or shares of Series A Preferred Stock acquired by the Corporation by reason of redemption, purchase, conversion or otherwise shall be reissued, and all such shares shall be cancelled, retired and restored to the status of undesignated Preferred Stock.

FIFTH: The Corporation reserves the right to adopt, repeal, rescind or amend in any respect any provisions contained in this Certificate of Incorporation in the manner now or hereafter prescribed by applicable law and in accordance with the terms of the Certificate of Incorporation, and all rights conferred on stockholders herein are granted subject to this reservation.

SIXTH: The management of the business and the conduct of the affairs of the Corporation shall be vested in the Corporation's Board of Directors. The number of directors constituting the whole Board of Directors shall be fixed by, or in the manner provided in, the Bylaws of the Corporation.

SEVENTH: Elections of directors need not be by written ballot unless the Bylaws of the Corporation shall so provide.

EIGHTH: The Corporation eliminates the personal liability of each member of its Board of Directors to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, provided that the foregoing shall not eliminate the liability of a director (i) for any breach of such director's duty of loyalty to the Corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of Title 8 of the Delaware Code, or (iv) for any transaction from which such director derived an improper personal benefit. If the Delaware General Corporation Law is amended in the future to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the Delaware General Corporation Law, as so amended from time to time. Neither any amendment nor repeal of this Article EIGHTH, nor the adoption of any provision of this Certificate of Incorporation inconsistent with this Article EIGHTH, shall eliminate or reduce the effect of this Article EIGHTH in respect of any matter occurring, or any cause of action, suit or claim that, but for this Article EIGHTH, would accrue or arise, prior to such amendment, repeal or adoption of an inconsistent provision.

NINTH: A director of the Corporation shall, to the full extent permitted by the Delaware General Corporation Law as it now exists or as it may hereafter be amended, be indemnified and held harmless by the Corporation, as hereinafter provided in Article Fourteen. Neither any amendment nor repeal of this Article NINTH, nor the adoption of any provision of this Certificate of Incorporation inconsistent with this Article NINTH, shall adversely affect any right or protection of a director in respect of any matter occurring, or any cause of action, suit or claim arising out of any matter occurring, prior to such amendment, repeal or modification.

TENTH: In furtherance and not in limitation of the powers conferred by statute, the Board of Directors shall have the power, both before and after receipt of any payment for any of the Corporation's capital stock, to adopt, amend, repeal or otherwise alter the Bylaws of the Corporation without any action on the part of the stockholders; provided, however, that the grant of such power to the Board of Directors shall not divest the stockholders of nor limit their power to adopt, amend, repeal or otherwise alter the Bylaws.

ELEVENTH: The Corporation expressly elects not to be governed by Section 203 of the Delaware General Corporation Law.

TWELFTH: In furtherance and not in limitation of the powers conferred by the laws of the State of Delaware: Elections of directors need not be by written ballot unless the By-Laws of the Corporation shall so provide. The books of the Corporation may be kept at such

place within or without the State of Delaware as the By-Laws of the Corporation may provide or as may be designated from time to time by the Board of Directors of the Corporation.

Subject to the rights of the holders of any series of Preferred Stock, any vote or votes authorizing liquidation of the Corporation or proceedings for its dissolution may provide, subject to the rights of creditors and the rights expressly provided for particular classes or series of capital stock, for the distribution among the stockholders of the Corporation of the assets of the Corporation as provided herein, wholly or in part or in kind, whether such assets be in cash or other property, and may authorize the Board of Directors of the Corporation to determine the valuation of the different assets of the Corporation for the purpose of such liquidation and may divide or authorize the Board of Directors to divide such assets or any part thereof among the stockholders of the Corporation, in such manner that every stockholder will receive a proportionate amount in value (determined as provided herein) of cash or property of the Corporation upon such liquidation or dissolution even though each stockholder may not receive a strictly proportionate part of each such asset.

THIRTEENTH: Whenever a compromise or arrangement is proposed between this Corporation and its creditors or any class of them and/or between this Corporation and its stockholders or any class of them, any court of equitable jurisdiction within the State of Delaware may, on the application in a summary way of this Corporation or of any creditor or stockholder thereof or on the application of any receiver or receivers appointed for this Corporation under the provisions of Section 291 of Title 8 of the Delaware Code or on the application of trustees in dissolution or of any receiver or receivers appointed for this Corporation under the provisions of Section 279 of Title 8 of the Delaware Code, order a meeting of the creditors or class of creditors, and/or of the stockholders or class of stockholders of this Corporation, as the case may be, to be summoned in such manner as the said court directs. If a majority in number representing three-fourths in value of the creditors or class of creditors, and/or of the stockholders or class of stockholders of this Corporation, as the case may be, agree to any compromise or arrangement and to any reorganization of this Corporation as a consequence of such compromise or arrangement, the said compromise or arrangement and the said reorganization shall, if sanctioned by the court to which the said application has been made, be binding on all the creditors or class of creditors, and/or on all the stockholders or class of stockholders, of this Corporation, as the case may be, and also on this Corporation.

FOURTEENTH:

1. Actions, Suits and Proceedings Other than by or in the Right of the Corporation. The Corporation shall indemnify each person who was or is a party or is threatened to be made or party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the Corporation), by reason of the fact that he is or was, or has agreed to become, a director or officer of the Corporation, or is, or was serving, or has agreed to serve, at the request of the Corporation, as a director, officer or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise (including any employee benefit plan) (all such persons being referred to hereafter as an "Indemnitee"), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees),

judgments, fines and amounts paid in settlement actually and reasonably incurred by him or on his behalf in connection with such action, suit or proceeding and any appeal therefrom, if he acted in good faith and in a manner he reasonably believed to be in, or not opposed to, the best interests of the Corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which he reasonably believed to be in, or not opposed to, the best interests of the Corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that his conduct was unlawful. Notwithstanding anything to the contrary in this Article, except as set forth in Section 7 below, the Corporation shall not indemnify an Indemnatee seeking indemnification in connection with a proceeding (or part thereof) initiated by the Indemnatee unless the initiation thereof was approved by the Board of Directors of the Corporation.

2. Actions or Suits by or in the Right of the Corporation. The Corporation shall indemnify any Indemnatee who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the Corporation to procure a judgment in its favor by reason of the fact that he is or was, or has agreed to become, a director or officer of the Corporation, or is or was serving, or has agreed to serve, at the request of the Corporation, as a director, officer or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise (including any employee benefit plan), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees) and amounts paid in settlement actually and reasonably incurred by him or on his behalf in connection with such action, suit or proceeding and any appeal therefrom, if he acted in good faith and in a manner he reasonably believed to be in, or not opposed to, the best interests of the Corporation, except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the Corporation unless and only to the extent that the Court of Chancery of Delaware or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of such liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnify for such expenses (including attorneys' fees) which the Court of Chancery of Delaware or such other court shall deem proper.

3. Indemnification for Expenses of Successful Party. Notwithstanding the other provisions of this Article, to the extent that an Indemnatee has been successful, on the merits or otherwise, in defense of any action, suit or proceeding referred to in Section 1 and 2 of this Article, or in defense of any claim, issue or matter therein, or on appeal from any such action or proceeding, he shall be indemnified against all expenses (including attorneys' fees) actually and reasonably incurred by him or on his behalf in connection therewith. Without limiting the foregoing, if any action, suit or proceeding is disposed of, on the merits or otherwise (including a disposition without prejudice), without (i) the disposition being adverse to the Indemnatee, (ii) an adjudication that the Indemnatee was liable to the Corporation, (iii) a plea of guilty or nolo contendere by the Indemnatee, (iv) an adjudication that the Indemnatee did not act in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the Corporation, and (v) with respect to any criminal proceeding, an adjudication that the

Indemnatee had reasonable cause to believe his conduct was unlawful, the Indemnatee shall be considered for the purposes hereof to have been wholly successful with respect thereto.

4. Notification and Defense of Claim. As a condition precedent to his right to be indemnified, the Indemnatee must notify the Corporation in writing as soon as practicable of any action, suit, proceeding or investigation involving him for which indemnity will or could be sought. With respect to any action, suit, proceeding or investigation of which the Corporation is so notified, the Corporation will be entitled to participate therein at its own expense and/or to assume the defense thereof at its own expense, with legal counsel reasonably acceptable to the Indemnatee. After notice from the Corporation to the Indemnatee of its election so to assume such defense, the Corporation shall not be liable to the Indemnatee for any legal or other expense subsequently incurred by the Indemnatee in connection with such claim, other than as provided below in this Section 4. The Indemnatee shall have the right to employ his own counsel in connection with such claim, but the fees the expenses of such counsel incurred after notice from the Corporation of its assumption of the defense thereof shall be at the expense of the Indemnatee unless (i) the employment of counsel by the Indemnatee has been authorized by the Corporation, (ii) counsel to the Indemnatee shall have reasonably concluded that there may be a conflict of interest or position on any significant issue between the Corporation and the Indemnatee in the conduct of the defense of such action, or (iii) the Corporation shall not in fact have employed counsel to assume the defense of such action, in each of which cases the fees and expenses of counsel for the Indemnatee shall be at the expense of the Corporation, except as otherwise expressly provided by this Article. The Corporation shall not be entitled, without the consent of the Indemnatee, to assume the defense of any claim brought by or in the right of the Corporation or as to which counsel for the Indemnatee shall have reasonably made the conclusion provided for in clause (ii) above.

5. Advance of Expenses. Subject to the provisions of Section 6 below, in the event that the Corporation does not assume the defense pursuant to Section 4 of this Article of any action, suit proceeding or investigation of which the Corporation receives notice under this Article, any expenses (including attorneys' fees) incurred by an Indemnatee in defending a civil or criminal action, suit, proceeding or investigation or any appeal therefrom shall be paid by the Corporation in advance of the final disposition of such matter, provided, however, that the payment of such expenses incurred by an Indemnatee in advance of the final disposition of such matter shall be made only upon receipt of an undertaking by or on behalf of the Indemnatee to repay all amounts so advanced in the event that it shall ultimately be determined that the Indemnatee is not entitled to be indemnified by the Corporation as authorized in this Article. Such undertaking may be accepted without reference to the financial ability of such person to make such repayment.

6. Procedure for Indemnification. In order to obtain indemnification or advancement of expenses pursuant to Section 1, 2, 3 or 5 of this Article, the Indemnatee shall submit to the Corporation a written request, including in such request such documentation and information as is reasonably available to the Indemnatee and is reasonably necessary to determine whether and to what extent the Indemnatee is entitled to indemnification or advancement of expenses. Any such indemnification or advancement of expenses shall be made promptly, and in any event within 60 days after receipt by the Corporation of the written request

of the Indemnitee, unless with respect to requests under Section 1, 2 or 5 the Corporation determines within such 60-day period that the Indemnitee did not meet the applicable standard of conduct set forth in Section 1 or 2, as the case may be. Such determination shall be made in each instance by (a) a majority vote of a quorum of the directors of the Corporation consisting of persons who are not at that time parties to the action, suit or proceeding in question ("disinterested directors"), (b) if no such quorum is obtainable, a majority vote of a committee of two or more disinterested directors, (c) a majority vote of a quorum of the outstanding shares of stock of all classes entitled to vote for directors, voting as a single class, which quorum shall consist of stockholders who are not at that time parties to the action, suit or proceeding in question, (d) independent legal counsel (who may be regular legal counsel to the Corporation), or (e) a court of competent jurisdiction.

7. Remedies. The right to indemnification or advances as granted by this Article shall be enforceable by the Indemnitee in any court of competent jurisdiction if the Corporation denies such request, in whole or in part, or if no disposition thereof is made within the 60-day period referred to above in Section 6. Unless otherwise required by law, the burden of proving that the Indemnitee is not entitled to indemnification or advancement of expenses under this Article shall be on the Corporation. Neither the failure of the Corporation to have made a determination prior to the commencement of such action that indemnification is proper in the circumstances because the Indemnitee has met the applicable standard of conduct, nor an actual determination by the Corporation pursuant to Section 6 that the Indemnitee has not met such applicable standard of conduct, shall be a defense to the action or create a presumption that the Indemnitee has not met the applicable standard of conduct. The Indemnitee's expenses (including attorneys, fees) incurred in connection with successfully establishing his right to indemnification, in whole or any part, in any such proceeding shall also be indemnified by the corporation.

8. Subsequent Amendment. No amendment, termination or repeal of this Article or of the relevant provisions of the General Corporation Law of Delaware or any other applicable laws shall affect or diminish in any way the rights of any Indemnitee to indemnification under the provisions hereof with respect to any action, suit, proceeding or investigation arising out of or relating to any actions, transactions or facts occurring prior to the final adoption of such amendment, termination or repeal.

9. Other Rights. The indemnification and advancement of expenses provided by this Article shall not be deemed exclusive of any other rights to which an Indemnitee seeking indemnification or advancement of expenses may be entitled under any law (common or statutory), agreement vote of stockholders or disinterested directors or otherwise, both as to action in his official capacity and as to action in any other capacity while holding office for the Corporation, and shall continue as to an Indemnitee who has ceased to be a director or officer, and shall inure to the benefit of the estate, heirs, executors and administrators of the Indemnitee. Nothing contained in this Article shall be deemed to prohibit, and the Corporation is specifically authorized to enter into, agreements with officers and directors providing indemnification rights and procedures different from those set forth in this Article. In addition, the Corporation may, to the extent authorized from time to time by its Board of Directors, grant indemnification rights to

other employees or agents of the Corporation or other persons serving the Corporation and such rights may be equivalent to, or greater or less than, those set forth in this Article.

10. Partial Indemnification. If an Indemnitee is entitled under any provision of this Article to indemnification by the corporation for some or a portion of the expenses (including attorneys' fees), judgments, fines or amounts paid in settlement actually and reasonably incurred by him or on his behalf in connection with any action, suit, proceeding or investigation and any appeal therefrom but not, however, for the total amount thereof, the Corporation shall nevertheless indemnify the Indemnitee for the portion of such expenses (including attorneys, fees), judgments, fines or amounts paid in settlement to which the Indemnitee is entitled.

11. Insurance. The Corporation may purchase and maintain insurance, at its expense, to protect itself and any director, officer, employee or agent of the Corporation or another corporation, partnership, joint venture, trust or other enterprise (including any employee benefit plan) against any expense, liability or loss incurred by him in any such capacity, or arising out of his status as such, whether or not the Corporation would have the power to indemnify such person against such expense, liability or loss under the General Corporation Law of Delaware.

12. Merger or Consolidation. If the Corporation is merged into or consolidated with another corporation and the Corporation is not the surviving corporation, the surviving corporation shall assume the obligations of the Corporation under this Article with respect to any action, suit, proceeding or investigation arising out of or relating to any actions, transactions or facts occurring prior to the date of such merger or consolidation, or the merger or consolidation itself.

13. Savings Clause. If this Article or any portion hereof shall be invalidated on any ground by any court of competent jurisdiction, then the Corporation shall nevertheless indemnify each Indemnitee as to any expenses (including attorneys' fees), judgments, fines and amounts paid in settlement in connection with any action, suit, proceeding or investigation, whether civil, criminal or administrative, including an action by or in the right of the Corporation, to the fullest extent permitted by any applicable portion of this Article that shall not have been invalidated and to the fullest extent permitted by applicable law.

14. Definitions. Terms used herein and defined in Section 145(h) and Section 145(i) of the General Corporation Law of Delaware shall have the respective meanings assigned to such terms in such Section 145(h) and Section 145(i).

15. Subsequent Legislation. If the General Corporation Law of Delaware is amended after adoption of this Article to expand further the indemnification permitted to Indemnitees, then the Corporation shall indemnify such persons to the fullest extent permitted by the General Corporation Law of Delaware, as so amended.

06/25/99 10:33 FAX 617 248 7100

TESTA.HURWITZ&THIBEAULT

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Jun. 24. 1999 10:56AM Vitis Networks

No. 0527 P. 5/14

IN WITNESS WHEREOF, this Amended and Restated Certificate of Incorporation has been signed by the President & COO of the Corporation this 23 day of June, 1999.

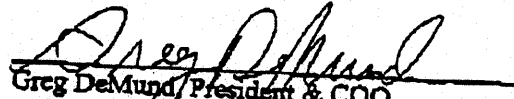

Greg Demund, President & COO

EXHIBIT 2

Managerial and Technical Qualifications

Senior Management Team

Chris Oliver, Chairman and Chief Executive Officer

As founder, Chairman and Chief Executive Officer of Vitts Networks since 1996, Chris Oliver is responsible for the company's vision, overall corporate strategy and providing technical direction. Prior to founding Vitts Networks, Oliver was Chief Technology Officer and Managing Director of Engineering and Manufacturing at Cabletron Systems Inc. from 1985. During that time, Oliver was responsible for Cabletron's technology vision and strategy. While at Cabletron, he led a team of 1,200 hardware and software engineers in the development of numerous industry leading products. An inventor, Oliver holds several patents in the field of advanced Internet protocol packet-based networking technologies.

Greg DeMund, President and Chief Operations Officer

Greg DeMund was elected President by the Vitts Board of Directors in January 1998. Having served as COO of Vitts since October 1996, he is responsible for day to day operations and management of the company. Prior to Vitts, DeMund worked at Cabletron Systems for seven years, during which he served as Director of Business Development, Managing Director of European Operations and Director of Acquisitions. In addition to his positions at Cabletron, DeMund has been involved in the computer networking industry for over 18 years with Interlan, Autographix, and Prime Computer.

William Marshall, Chief Financial Officer and Treasurer

William Marshall joined Vitts in October 1999 as Treasurer and Chief Financial Officer. Prior to joining Vitts, Bill served as Chief Financial Officer of the Viisage Technology Division of Lau Technologies from December 1995 through the spin-off and initial public offering of the Company in November 1996. Prior to Viisage, Bill was a Partner with KPMG Peat Marwick from 1987 through 1995. Bill has a Bachelor of Science degree in Accounting from Elizabethtown College in Pennsylvania where he graduated summa cum laude.

Philip A. Gardella, Jr., Vice President Finance

Phil Gardella joined Vitts in February 1997 as its Controller and has since been named Vice President of Finance. He is responsible for Vitts' financial accounting, reporting, planning, and control, as well as human resources. Prior to joining Vitts, Gardella was the Corporate Controller for Proteon, Inc., a publicly held network access company. He has worked in various finance and accounting roles with Coopers & Lybrand, Pepsi Co., Digital Equipment Corporation, and Focus Enhancements, Inc. Gardella is a CPA in New Hampshire and Massachusetts and holds an MBA from Babson College.

Robert McPhearson, Vice President of Direct Sales

Robert McPhearson joined Vitts in September 1999. Rob is responsible for all direct account sales for Vitts' six state New England region. Rob brings with him an extensive background in enterprise network technology selling and sales origination management. Prior to joining Vitts, Rob was the New England Regional Sales Director for Cabletron Systems Inc.

Richard O'Connell, Vice President of Channel Sales

Richard O'Connell joined Vits in July 1999. Rick is responsible for developing and managing Vits indirect sales organization which includes affiliated independent retailers and value added resellers that are authorized to offer Vits branded services. Prior to joining Vits Rick's focus was Vice President of World Wide Channel Development. His responsibilities included the development of distributors, mail order, retail channels, and system Integrators channels. He also held senior management roles in Daewoo Electronics and McCaw Cellular.

Jim Atkins, Vice President of Network Operations

Jim Atkins joined Vits in July 1998 as Director of Operations, having responsibility for all Vits Protected Service Network facility engineering including design, implementation, administration. Prior to joining Vits, Atkins spent 31 years with New England Telephone, Nynex and Bell Atlantic where his experience included a variety of engineering, construction and operations assignments in New Hampshire and Vermont. He spent 10 years as a director of operations in Maine and Eastern Massachusetts, where he was responsible for all Nynex Provisioning and Maintenance activity.

Karen Lloyd, Vice President of Marketing

Ms. Lloyd is responsible for Vits' marketing, advertising and public relations. Prior to joining Vits, Ms. Lloyd was Vice President of Marketing for Aztec Technology Partners, an e-solutions provider, and its subsidiary Bay State Computer Group. Ms. Lloyd previously served 5 years as Director of Marketing at CIC Systems (now CompuCom), and has held marketing management positions in other industries including consumer products, financial services and direct mail.

Bruce Dyke, Vice President of Support & Data Services

Mr. Dyke is responsible for ensuring that service connections for Vits' customers are seamlessly installed and for providing 24x7 support. Prior to joining Vits, Mr. Dyke was director of information services at Granite State Management and Resources, and spent 5 years with Cableton Systems as manager for second-level software support and for their global call center.

EXHIBIT 3

Financial Statements
-Confidential and Proprietary-

[FILED UNDER SEAL]

EXHIBIT 4

Projected Financials
-Confidential and Proprietary-

[FILED UNDER SEAL]

EXHIBIT 5

Capital Expenditure Budget
-Confidential and Proprietary-

[FILED UNDER SEAL]

EXHIBIT 6

Cost of Proposed Network
-Confidential and Proprietary-

[FILED UNDER SEAL]

EXHIBIT 7

Illustrative Tariff

Vitts Networks, Inc.

T.R.A. Tariff No. 1
Original Page 1

TENNESSEE TELECOMMUNICATIONS TARIFF

OF

VITTS NETWORKS, INC.

77 Sundial Avenue
Manchester, NH 03103

This tariff contains the descriptions, regulations, and rates applicable to the telecommunications services offered by Vitts Networks, Inc. (Vitts) within the State of Tennessee. This tariff is on file with the Tennessee Regulatory Authority (T.R.A.). Copies may be inspected during normal business hours at the Company's principal place of business.

ILLUSTRATIVE

ISSUED:
EFFECTIVE:

ISSUED BY: Gregory DeMund
TITLE: President

CHECK SHEET

Sheets 1 through 26 inclusive of this tariff are effective as of the date shown at the bottom of the respective sheet(s). Original and revised sheets are named below and comprise all changes from the original tariff and are currently in effect as of the date on the bottom of this page.

<u>SHEET</u>	<u>REVISION</u>	<u>SHEET</u>	<u>REVISION</u>
1	original	18	original
2	original	19	original
3	original	20	original
4	original	21	original
5	original	22	original
6	original	23	original
7	original	24	original
8	original	25	original
9	original	26	original
10	original		
11	original		
12	original		
13	original		
14	original		
15	original		
16	original		
17	original		

ISSUED:
EFFECTIVE:

ISSUED BY: Gregory DeMund
TITLE: President

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ISSUED:
EFFECTIVE:

ISSUED BY: Gregory DeMund
TITLE: President

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ISSUED:
EFFECTIVE:

ISSUED BY: Gregory DeMund
TITLE: President

EXPLANATION OF SYMBOLS

- (C) To signify **changed** conditions or regulation
- (D) To signify **discontinued** rate, conditions or regulation
- (I) To signify **increase**
- (K) To signify that material has been **transferred to** another sheet or place in the tariff
- (M) To signify that material has been **transferred from** another sheet or place in the tariff.
- (N) To signify a **new** rate, regulation, condition or sheet
- (R) To signify a **reduction**
- (T) To signify a change in **text** for **clarification**, but no change in rate or charge

ISSUED:
EFFECTIVE:

ISSUED BY: Gregory DeMund
TITLE: President

TARIFF FORMAT

- A. Sheet Numbering - Sheet numbers appear in the upper right corner of the page. Sheets are numbered sequentially. However, new sheets are occasionally added to the tariff. When a new sheet is added between sheets already in effect, a decimal is added. For example, a new sheet added between sheets 14 and 15 would be 14.1.
- B. Sheet Revision Numbers - Revision numbers also appear in the upper right corner of each page. These numbers are used to determine the most current sheet version on file with the T.R.A. For example, the 4th revised Sheet 14 cancels the 3rd revised Sheet 14. Because of various suspension periods, deferrals, etc. the T.R.A. follows in its tariff approval process, the most current sheet number on file with the T.R.A. is not always the tariff page in effect. Consult the Check Sheet for the sheet currently in effect.
- C. Paragraph Numbering Sequence - There are nine levels of paragraph coding. Each level of coding is subservient to its next higher level:
- 2.
 - 2.1.
 - 2.1.1.
 - 2.1.1.A.
 - 2.1.1.A.1.
 - 2.1.1.A.1.(a).
 - 2.1.1.A.1.(a).I.
 - 2.1.1.A.1.(a).I.(i).
 - 2.1.1.A.1.(a).I.(i).(1).
- D. Check Sheets - When a tariff filing is made with the T.R.A., an updated check sheet accompanies the tariff filing. The check sheet lists the sheet contained in the tariff, with a cross reference to the current revision number. When new pages are added, the check sheet is changed to reflect the revision. All revisions made in a given filing are designated by an asterisk (*). There will be no other symbols used on this page if these are the only changes made to it (i.e., the format, etc. remains the same, just revised revision levels on some pages). The tariff user should refer to the latest check sheet to find out if a particular sheet is the most current on file with the T.R.A.

ISSUED:
EFFECTIVE:

ISSUED BY: Gregory DeMund
TITLE: President

SECTION 1 - APPLICATION OF TARIFF

- 1.1.** This tariff contains the rates applicable to the provision of intrastate telecommunications services by Vitts Networks, Inc. (Vitts) between various locations within the State of Tennessee. Service is furnished subject to transmission, atmospheric and like conditions.
- 1.2.** The telecommunications services of the Company are not part of a joint undertaking with any other entity providing telecommunications channels, facilities or services. However, services offered under this tariff are conditioned upon the continued availability of various services provided to the Company by its underlying carriers.
- 1.3.** The rates and regulations contained in this tariff do not apply, unless otherwise specified, to the lines, facilities, or services provided by a local exchange telephone company or other common carrier for use in accessing the services of the Company.

ISSUED:
EFFECTIVE:

ISSUED BY: Gregory DeMund
TITLE: President

SECTION 2 - TECHNICAL TERMS AND ABBREVIATIONS

Authorization Code:

A numeric code, one or more of which may be assigned to a Customer to enable identification of individual users or groups of users on an account and to allocate costs of service accordingly. Authorization Codes are the sole property of the Company, and no Customer shall have any property or other right or interest in the use of any particular Authorization Code.

Automatic Number Identification (ANI):

A type of signaling provided by a local exchange telephone company which automatically identifies the local exchange line from which a call originates.

Billed Party:

The person or entity responsible for payment of the Company's service. The Billed Party is the Customer associated with the Authorization Code used to place the call, with the following exceptions:

- (a) In the case of a calling card or credit card call, the Billed Party is the party assigned the Authorization Code for the calling card or credit card used by the Users; and
- (b) In the case of a collect or third party call, the Billed Party is the person responsible for the local telephone service at the telephone number that agrees to accept charges for the call.

Called Station:

The terminating point of a call.

ISSUED:
EFFECTIVE:

ISSUED BY: Gregory DeMund
TITLE: President

SECTION 2 - TECHNICAL TERMS AND ABBREVIATIONS, Continued

Calling Card:

A card issued by Company containing such account numbers assigned to its Customer which enables the charges for calls made to be properly billed on a pre-arranged basis.

Calling Station:

The originating point of a call.

Company:

Vitts Networks, Inc. (Vitts).

Customer:

The person, firm, corporation or other entity which orders or uses service and is responsible for payment of charges and compliance with tariff regulations.

Customer Dialed Calling Card Call:

A Calling Card Call which does not require intervention by an attended operator position to complete.

Subscriber:

See "Customer" definition.

ISSUED:
EFFECTIVE:

ISSUED BY: Gregory DeMund
TITLE: President

SECTION 2 - TECHNICAL TERMS AND ABBREVIATIONS, Continued

Telecommunications:

The transmission of voice communications or, subject to the transmission capabilities of the service, the transmission of data, facsimile, signaling, metering, or any other form of intelligence.

T.R.A.:

The Tennessee Regulatory Authority.

User:

A Customer, or any person or entity which makes use of services provided to a Customer under this tariff.

Verified Account Code:

A numerical code, one or more of which are available to a Customer to enable identification of individual users or groups of users on an account and to allocate costs of service accordingly. Account codes are verified against a predefined list of codes maintained by the Company.

ISSUED:
EFFECTIVE:

ISSUED BY: Gregory DeMund
TITLE: President

SECTION 3 - TERMS AND CONDITIONS

3.1. UNDERTAKING OF VITTS NETWORKS, INC.

- 3.1.1. The Company undertakes to provide telecommunications services to Customers for their lawful direct transmission and reception of data and other types of communications in accordance with the terms and conditions set forth in this tariff. Voice service will not be offered until a specific service offering is filed as a supplement to this Tariff.
- 3.1.2. All service is subject to the availability of necessary and suitable facilities and to the provisions of this tariff. The Company or its designee may act as the Customer's agent for ordering access connection facilities provided by other carriers or entities, when authorized by the Customer, to allow connection of a Customer's location to a service provided by the Company. The Customer shall be responsible for all charges due for such service arrangement.
- 3.1.3. The Company's services are provided on a monthly basis unless otherwise provided, and are available twenty-four (24) hours per day, seven (7) days per week.
- 3.1.4. For additional cost, and subject to availability, the Customer may use Authorization Codes to identify the user groups on an account. The numerical composition of the codes shall be set by Company to assure compatibility with the Company's accounting and billing systems and to avoid the duplication of codes.
- 3.1.5. The Company shall not be responsible for any installation, operation or maintenance of any Customer-provided communications equipment. Where such equipment is connected to service furnished pursuant to this tariff, the responsibility of the Company shall be limited to the furnishing of services under this tariff and to the maintenance and operation of such services in the proper manner.

ISSUED:
EFFECTIVE:

ISSUED BY: Gregory DeMund
TITLE: President

SECTION 3- RULES AND REGULATIONS, Continued

3.1 UNDERTAKING OF VITTS NETWORKS, INC., Continued

- 3.1.6. Customer-provided station equipment at the Customer's premises for use in connection with this service shall be so constructed, maintained and operated as to work satisfactorily with the facilities of the Company. The Company assumes no liability with respect to the operation or maintenance of such equipment.

3.2 LIMITATIONS

- 3.2.1. Company reserves the right to disconnect service immediately without incurring liability when necessitated by conditions beyond the Company's control or when the Customer is using the service in violation of either the provisions of this tariff or the laws, rules, regulations, or policies of the jurisdiction of the Calling Station or the Called Station, or the laws of the United States including rules, regulations and policies of the Federal Communications Commission.
- 3.2.2. The Company does not undertake to transmit messages, but offers the use of its facilities when available, and will not be liable for errors in transmission or for failure to establish connections.
- 3.2.3. Prior written permission from the Company is required before any assignment or transfer. All regulations and conditions contained in this tariff shall apply to all such permitted assignees or transferees, as well as all conditions of service.

3.3 USE

- 3.3.1. Services may be used for the lawful transmission of communications by the Customer consistent with the provisions of this tariff.
- 3.3.2. Service may not be used for any unlawful purpose. The use of the Company's services to make calls which might reasonably be expected to frighten, abuse, torment or harass another or in such a way as to unreasonably interfere with use by others is prohibited.

ISSUED:
EFFECTIVE:

ISSUED BY: Gregory DeMund
TITLE: President

SECTION 3 - RULES AND REGULATIONS, Continued

3.3 USE, Continued

- 3.3.3. The use of the Company's services without payment for service, as well as any attempt to avoid payment for service by fraudulent means or devices, schemes, false or invalid numbers, or false calling or credit cards is prohibited.
- 3.3.4. The Company's services are available for use twenty-four (24) hours per day, seven (7) days per week.
- 3.3.5. Customers of service provided under this tariff may authorize or permit others to use these services, and may resell or share such services subject to the regulations contained in this tariff. The Customer remains responsible to the Company for payment of all charges for services used by others pursuant to this paragraph, with or without the Customer's knowledge, and is responsible for notifying the Company immediately of any unauthorized use of services.

3.4 LIABILITIES OF THE COMPANY

- 3.4.1. Except as stated in this Section 3.4, the Company shall have no liability for damages of any kind arising out of or related to events, acts, rights or privileges contemplated in this tariff.
- 3.4.2. The Company shall not be liable for any failure of performance hereunder due to causes beyond its control, including but not limited to, acts of God, fires, flood or other catastrophes; any law, order, regulation, directive, action or request of the United States Government, or any other government, including state and local governments having jurisdiction over the Company, or of any department, agency, commission, bureau, corporation or other instrumentality of any one or more of said governments, or of any civil or military authority; national emergencies; insurrections; riots; wars; or other labor difficulties.

ISSUED:
EFFECTIVE:

ISSUED BY: Gregory DeMund
TITLE: President

SECTION 3 - TERMS AND CONDITIONS, Continued

3.4 LIABILITIES OF THE COMPANY, Continued

- 3.4.3. The Company shall not be liable for any act or omission of any other entity furnishing to the Customer facilities, equipment, or services used with the Company's services. Nor shall the Company be liable for any damages or losses due to the failure or negligence of the Customer or due to the failure of Customer-provided equipment, facilities or services. Company is not liable for any act or omission of any other company or companies furnishing a portion of the service. No agents or employees of connecting, concurring or other participating carriers or companies shall be deemed to be agents or employees of the Company without written authorization.
- 3.4.4. Company shall not be liable for and Customer shall indemnify and hold Company harmless from any and all loss, claims, demands, suits, or other action or liability whatsoever, whether suffered, made, instituted or asserted by the Customer or by any other party or persons, for any personal injury to, or death of, any person or persons, and for any loss, damage, defacement or destruction of the premises of the Customer or any other property, whether owned by the Customer or by others, caused or claimed to have been caused directly or indirectly by the installation, operation, failure to operate, maintenance, removal, presence, condition, location or use of equipment or wiring provided by Company where such installation, operation, failure to operate, maintenance, condition, location or use is not the direct result of Company's negligence.
- 3.4.5. The liability of the Company, for mistakes, omissions, interruptions, delays, errors or defects in transmission shall not exceed an amount equivalent to the proportionate recurring charge to the Customer for the period of service during which such events occur. No credit shall be allowed for an interruption of a continuous duration of less than twenty-four (24) hours. For purposes of determining service credits, a month shall be deemed to have seven hundred twenty (720) hours. Any credits will be set off against charges billed during the next month.

ISSUED:
EFFECTIVE:

ISSUED BY: Gregory DeMund
TITLE: President

SECTION 3 - TERMS AND CONDITIONS, Continued

3.4 LIABILITIES OF THE COMPANY, Continued

3.4.6. Company shall be indemnified and held harmless by the Customer against:

- A. Claims for libel, slander, infringement of copyright or unauthorized use of any trademark, trade name or service mark arising out of material, data, information or other content transmitted over Company's facilities; and
- B. Claims for patent infringement arising from combining or connecting Company's facilities with apparatus and systems of the Customer; and
- C. All other claims arising out of any act or omission of the Customer in connection with any service provided by Company.

3.4.7 The Company shall not be liable for damages or adjustment, refund, or cancellation of charges unless the Customer has notified the Company in writing, of any dispute concerning charges, or the basis of any claim for damages, within thirty (30) calendar days after the invoice is rendered or a debit is effected by the Company for the call giving rise to such dispute or claim. Any such notice must set forth sufficient facts to provide the Company with a reasonable basis upon which to evaluate the Customer's claim or demands. If notice of a dispute concerning the charges is not received, in writing, within thirty (30) calendar days after an invoice is rendered or a debit is effected, such invoice shall be deemed to be correct, accepted, and binding upon the Customer.

3.5 OBLIGATIONS OF THE CUSTOMER

3.5.1. The Customer shall provide the personnel, power and space required to operate all facilities and associated equipment installed on the premises of the Customer.

3.5.2. The Customer shall be responsible for providing Company personnel access to premises of the Customer at any reasonable hour for the purpose of testing the facilities or equipment of the Company.

ISSUED:
EFFECTIVE:

ISSUED BY: Gregory DeMund
TITLE: President

SECTION 3 - TERMS AND CONDITIONS, Continued

3.5 OBLIGATIONS OF THE CUSTOMER, Continued

- 3.5.3. The Customer will be liable for damages to the facilities of the Company caused by negligence or willful acts of any officers, employees, agents or contractors of the Customer.
- 3.5.4. The Company may, upon notification of the Customer, at a reasonable time, make such tests and inspections as may be necessary to determine that the requirements of this tariff are being complied with in the installation, operation and maintenance of Customer-provided equipment and in the wiring of the connection of Customer channels to Company-owned facilities. The Company may temporarily suspend service without liability, while making such tests and inspections, and thereafter until any violations of such requirements are corrected.
- 3.5.5. Consistent with T.R.A. rules, the Company will take action to protect its personnel and operations from conditions dangerous to health or safety and to ensure its ability to serve other Customers. The Company will promptly notify the Customer by registered mail in writing of the need for protective action. In the event that the Customer fails to advise the Company within twelve (12) days after such notice is received that corrective action has been taken, the Company may take whatever additional action is deemed necessary, including the suspension of service, to protect its operations and personnel from harm and ensure its ability to serve other Customers. The Company will upon request twenty-four (24) hours in advance provide Customer with a statement of technical parameters that the Customer's equipment must meet.
- 3.5.6. The Customer is responsible for prompt payment of all charges for services rendered by the Company.
- 3.5.7. The name(s) of the Customer(s) desiring to use the service must be set forth in the application for service.

ISSUED:
EFFECTIVE:

ISSUED BY: Gregory DeMund
TITLE: President

SECTION 3 - TERMS AND CONDITIONS, Continued

3.6. INTERRUPTION OF SERVICE

Credit allowance for interruptions of service which are not due to Company's testing or adjusting, to the negligence or willful acts of the Customer, or to the failure of channels, equipment and/or communications equipment provided by the Customer, are subject to the general liability provisions set forth in Section 3.4, herein. It shall be the obligation of the Customer to notify Company of any interruptions of service. Before giving such notice, the Customer shall ascertain that the trouble is not being caused by any action or omission of the Customer, not within the Customer's control, and/or is not in the wiring or equipment connected to the terminal of the Company.

3.7. RESTORATION OF SERVICE

The use and restoration of service in emergencies shall be in accordance with Part 65, Subpart D of the Federal Communications Commission's Rules and Regulations, which specifies the priority system for such activities.

3.8. PAYMENTS AND BILLING

- 3.8.1. Service is provided and billed on a monthly basis. Unless otherwise agreed, the minimum service period is one (1) month. Service continues to be provided until canceled by the Customer in accordance with the provisions of this tariff.
- 3.8.2. The Customer is responsible for the payment of all charges for services furnished by the Company. Charges are based on actual usage during a month and will be billed monthly in arrears.
- 3.8.3. Bills are due and payable upon receipt and past due thirty (30) days after issuance. Past due amounts are subject to late charges as set forth in the applicable service contract.
- 3.8.4. An additional charge will be assessed for each Customer check returned as non-payable.

ISSUED:
EFFECTIVE:

ISSUED BY: Gregory DeMund
TITLE: President

SECTION 3 - TERMS AND CONDITIONS, Continued

3.8. PAYMENTS AND BILLING, Continued

- 3.8.5. Customer questions, complaints and disputes regarding billing or service provided by the Company may be referred to Vitts' customer service department in writing at 77 Sundial Ave., Manchester, NH 03103 or by telephoning at (888) 656-1800.

3.9. CANCELLATION BY CUSTOMER

- 3.9.1. Business Customers may cancel service upon not less than thirty (30) days' written notice to Vitts unless a longer notice period is specified in an applicable service contract executed by the Customer.
- 3.9.2. If the Customer has ordered service requiring special facilities dedicated to the Customer's use and then cancels the order before completion of the minimum service period or some other period mutually agreed with the Customer, the Customer shall be liable for the nonrecoverable portions of expenditures or liabilities incurred expressly on behalf of the Customer by Company.

3.10. INTERCONNECTION

- 3.10.1. Service furnished by Company may be interconnected with services or facilities of other authorized communications common carriers and with private systems, subject to the technical limitations established by Company. Any special interface of equipment or facilities necessary to achieve compatibility between the facilities of Company and other participating carriers shall be provided at the Customer's expense.
- 3.10.2. Interconnection between the facilities or services of other carriers shall be under the applicable terms and conditions of the other carriers' tariffs. The Customer is responsible for taking all necessary legal steps for interconnecting Customer provided terminal equipment or communications equipment with Company's facilities. The Customer shall secure all licenses, permits, rights-of-way, and other such arrangements necessary for interconnection.

ISSUED:
EFFECTIVE:

ISSUED BY: Gregory DeMund
TITLE: President

SECTION 3 - TERMS AND CONDITIONS, Continued

3.11. CANCELLATION BY COMPANY

- 3.11.1. Service may be discontinued or temporarily suspended by the Company, without notice to the Customer, and Company may block traffic to certain cities or NXX exchanges, or block calls using certain Authorization Codes, when the Company deems it necessary to take such action to prevent the unlawful, unauthorized or hazardous use of its service. The Company will restore service as soon as it can be provided without undue risk.
- 3.11.2. Without incurring liability, upon thirteen (13) days' written notice for business Customers, the Company may discontinue the provision of service to a Customer or to a particular Customer location, or may withhold the provision of ordered or contracted services:
- A. For nonpayment of any sum of \$50.00 or more due the Company for more than thirty (30) days after issuance of the bill for amount due,
 - B. For violation of any of the provisions of this tariff or any applicable service contract,
 - C. For violation of any law, rule, regulation or policy of any governing authority having jurisdiction over the Company's services,
 - D. By reason of any order or decision of a court, public service commission or federal regulatory body or other governing authority prohibiting the Company from furnishing its services, or
 - E. In the event that the Company's underlying carrier(s) cease providing services to the Company which are necessary in order for the Company to provide the services described herein.

The discontinuation of service by the Company shall be consistent in all respects with applicable T.R.A. Rules.

ISSUED:
EFFECTIVE:

ISSUED BY: Gregory DeMund
TITLE: President

SECTION 3 - TERMS AND CONDITIONS, Continued

3.12. DEPOSITS

[Reserved]

ISSUED:
EFFECTIVE:

ISSUED BY: Gregory DeMund
TITLE: President

SECTION 3 - TERMS AND CONDITIONS, Continued

3.13. TAXES

All state and local taxes (i.e. gross receipts tax, sales tax, municipal utilities tax) are listed as separate line items and are not included in the quoted rates. Customers shall be responsible for any applicable taxes.

ISSUED:
EFFECTIVE:

ISSUED BY: Gregory DeMund
TITLE: President

SECTION 4 - DESCRIPTION OF SERVICE

4.1. TIMING OF CALLS

[Reserved]

4.2. VITTS NETWORKS, INC. SERVICES

Vitts provides dedicated inbound and outbound services to business Customers.

4.3. MINIMUM CALL COMPLETION RATE

[Reserved]

ISSUED:
EFFECTIVE:

ISSUED BY: Gregory DeMund
TITLE: President

SECTION 5 - RATES

5.1 RATE CALCULATIONS

The aggregate per minute rates for each service offered by Vitts are listed below, along with the increments in which those charges are billed. Call times are rounded up to the next highest billing increment. Applicable monthly charges, installation fees, and other requirements are set forth below.

5.2 RESIDENTIAL RATES

[Reserved]

5.3. COMMERCIAL SERVICE RATES – DRAFT

5.3.1 Data Service Transport Service Rates:

5.3.1.A DS1 Rates - Local Distribution Channels:

5.3.1.A.1 Non-recurring: \$ ____ per Data Transport Service Channel

5.3.1.A.2 Recurring:

Month to
Month

Fixed \$ ____ per termination point

First Mile ____

Each Additional Mile ____

ISSUED:
EFFECTIVE:

ISSUED BY: Gregory DeMund
TITLE: President

SECTION 5 – RATES, Continued

5.3 COMMERCIAL SERVICE RATES - DRAFT, Continued

5.3.1 Date Service Transport Rates (Continued)

5.3.1.B DS 3 Rates - Local Distribution Channels:

5.3.1.B.1. Non-recurring: ____ per Data Transport Service Channel

5.3.1.B.2 Recurring:

Month
to
Month

Fixed
Per Mile

\$ ____ per termination point

- 5.3.2. Service Calls. When a customer reports a trouble to the Company for clearance and no trouble is found in the Company's facilities or in the facilities of any other carriers with which the Company has arrangements, the Customer may be responsible for payment of a charge calculated from the time the Company's personnel are dispatched to the Customer premise until the work is completed. The per hour rate per technician is ____.
- 5.3.3. Individual Case Basis Arrangements. When the Company furnishes a facility or service for which a rate or charge is not specified in the Company's tariff, charges will be determined on an Individual Case Basis.
- 5.3.4. Promotional and Competitive Discounts. The Company, from time to time and in its discretion, may offer discounts from the above-specified tariff rates in connection with promotional offerings or to respond to service offerings of competing carriers. In no event will the price for a tariffed service exceed the tariff rate.

ISSUED:
EFFECTIVE:

ISSUED BY: Gregory DeMund
TITLE: President

SECTION 5 – RATES, Continued

5.4 COMMERCIAL SERVICE RATES II - DRAFT

5.4.1 Data Service Transport Service Rates:

5.4.1.A DS1 Rates - Local Distribution Channels:

5.4.1.A.1 Non-recurring: \$ ____ per Data Transport Service Channel

5.4.1.A.2 Recurring:

Month to
Month

Per termination point \$ ____

Fixed ____

Per Mile ____

ISSUED:
EFFECTIVE:

ISSUED BY: Gregory DeMund
TITLE: President

SECTION 5 – RATES, Continued

5.4 COMMERCIAL SERVICE RATES II - DRAFT, Continued

5.4.1 Date Service Transport Rates (Continued)

5.4.1.B DS 3 Rates - Local Distribution Channels:

5.4.1.B.1. Non-recurring: \$ ___ per Data Transport Service Channel

5.4.1.B.2 Recurring:

Month
to
Month

Per termination point \$ ___
Fixed _____
Per Mile _____

5.4.2. Service Calls. When a customer reports a trouble to the Company for clearance and no trouble is found in the Company's facilities or in the facilities of any other carriers with which the Company has arrangements, the Customer may be responsible for payment of a charge calculated from the time the Company's personnel are dispatched to the Customer premise until the work is completed. The per hour rate per technician is ___.

5.4.3. Individual Case Basis Arrangements. When the Company furnishes a facility or service for which a rate or charge is not specified in the Company's tariff, charges will be determined on an Individual Case Basis.

5.4.4. Promotional and Competitive Discounts. The Company from time to time and in its discretion, may offer discounts from the above-specified tariff rates in connection with promotional offerings or to respond to service offerings of competing carriers. In no event will the price for a tariffed service exceed the tariff rate.

ISSUED:
EFFECTIVE:

ISSUED BY: Gregory DeMund
TITLE: President

EXHIBIT 8

Small and Minority-Owned Telecommunications Business Participation Plan

Vitts Networks, Inc.

Small and Minority-Owned Telecommunications Business Participation Plan

Pursuant to T.C.A. §65-5-212, as amended, Vitts Networks, Inc. ("Vitts") submits this small and minority-owned telecommunications business participation plan (the "Plan") along with its Application for a Certificate of Public Convenience and Necessity to provide competing intrastate interexchange and local exchange services in Tennessee.

I. PURPOSE

The purpose of §65-5-212 is to provide opportunities for small and minority-owned businesses to provide goods and services to telecommunications service providers. Vitts is committed to the goals of Section 65-5-212 and to taking steps to support the participation of small and minority-owned telecommunications businesses in the telecommunications industry. Vitts will endeavor to provide opportunities for small and minority-owned telecommunications businesses to compete for contracts and subcontracts for good and services. As part of its procurement process, Vitts will make efforts to identify and inform minority-owned and small businesses that are qualified and capable of providing goods and services to Vitts of such opportunities. Vitts' representative will contact the Department of Economic and Community Development, the administrator of the small and minority-owned telecommunications assistance program, to obtain a list of qualified vendors. Moreover, Vitts will seek to increase awareness of such opportunities so that companies not otherwise identified will have sufficient information to participate in the procurement process.

II. DEFINITIONS

As defined in §65-5-212.

Minority-Owned Business. Minority-owned business shall mean a business which is solely owned, or at least fifty-one percent (51%) of the assents or outstanding stock of which is owned, by an individual who personally managers and controls daily operations of such business, and who is impeded from normal entry into the economic mainstream because of race, religion, sex or national origin and such business has annual gross receipts of less than four million dollars (\$4,000,000)

Small Business. Small Business shall mean a business with annual gross receipts of less than four million dollars (\$4,000,000).

III. ADMINISTRATION

Vitts' Plan will be overseen and administered by the individual named below, or his assign, hereinafter referred to as the Administrator, who will be responsible for carrying out and promoting Vitts' full efforts to provide equal opportunities for small and minority-owned businesses. The Administrator of the Plan will be:

Thomas Lyle, Regulatory Affairs Manager
Vitts Networks, Inc.
77 Sundial Avenue
Manchester, NH 03103

The Administrator's responsibilities will include:

- (1) Maintaining an updated Plan in full compliance with §65-5-212 and the rules and orders of the Tennessee Regulatory Authority.
- (2) Establishing and developing policies and procedures necessary for the successful implementation of the Plan.
- (3) Preparing and submitting such forms as may be required by the Tennessee Regulatory Authority, including the filing of required annual updates.
- (4) Serving as the primary liaison to and cooperate with the Tennessee Regulatory Authority, other agencies of the State of Tennessee, and small and minority-owned businesses to locate and use qualified small and minority-owned businesses as defined in §65-5-212.
- (5) Searching for and developing opportunities to use small and minority-owned businesses and encouraging such businesses to participate in and bid on contracts and subcontracts.
- (6) Providing records and reports and cooperate in any authorized surveys as required by the Tennessee Regulatory Authority.
- (7) Establishing a record-keeping system to tract qualified small and minority-owned businesses and efforts to use such businesses.
- (8) Providing information and educational activities to persons within Vitts and training such persons to seek out, encourage, and promote the use of small and minority-owned businesses.

In performance of these duties, the Administrator will utilize a number of resources, including:

Chambers of Commerce
The Tennessee Department of Economic and Community Development
The United States Department of Commerce
Small Business Administration
Office of Minority Business
The National Minority Supplier Development Counsel
The National Association of Women Business Owners
The National Association of Minority Contractors
Historically Black Colleges, Universities, and Minority Institutions

The efforts to promote and ensure equal opportunities for small and minority-owned businesses are primarily spelled out in the Administrator's duties above. Additional efforts to provide opportunities to small and minority-owned businesses will include offering, where appropriate and feasible, small and minority-owned business assistance with technical, insurance, bonding, licensing, production, and deadline requirements.

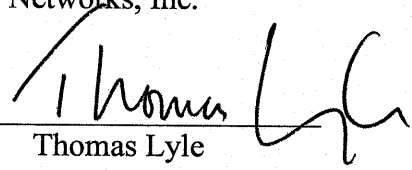
IV. RECORDS AND COMPLIANCE REPORTS

Vitts will maintain records of qualified small and minority-owned business and efforts to use the goods and services of such businesses. In addition, Vitts will maintain records of educational and training activities conducted or attended and of the internal procurement procedures adopted to support this plan.

Vitts will submit records and reports required by the Tennessee Regulatory Authority concerning the Plan. Moreover, Vitts will cooperate fully with any surveys and studies required by the Tennessee Regulatory Authority.

Vitts Networks, Inc.

BY:


Thomas Lyle

Regulatory Affairs Manager

Dated : 6/21, 2000

EXHIBIT 9

Sworn Pre-filed Testimony of Thomas Lyle

BEFORE THE TENNESSEE REGULATORY AUHTORITY

In the Matter of the Application of
Vitts Networks, Inc.
for a Certificate of Convenience and
Necessity to Provide Facilities-Based and
Resold Local Exchange and Interexchange
Telecommunications Services
Throughout the State of Tennessee

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Docket No. _____

**TESTIMONY OF THOMAS LYLE
ON BEHALF OF
VITTS NETWORKS, INC.**

1 **Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND TELEPHONE**
2 **NUMBER.**

3 **A.** My name is Thomas Lyle. My business address is Vitts Networks, Inc. ("Vitts"), 77
4 Sundial Avenue, Manchester, NH 03103. My business telephone number is (603) 656-
5 8017.

6 **Q. WHAT IS YOUR POSITION WITH VITTS?**

7 **A.** I am the Regulatory Affairs Manager.

8 **Q. WHAT ARE YOUR RESPONSIBILITIES THE REGULATORY AFFAIRS**
9 **MANAGER?**

10 **A.** I am responsible for government and regulatory affairs at the federal and state levels. My
11 primary goals as the regulatory affairs manager are to advance and protect the business
12 interests of Vitts, raise and refine public awareness about Vitts, our technology and IT
13 solutions through government and regulatory channels. In addition, I am responsible for
14 obtaining state regulatory approvals to conduct business as a competitive local exchange
15 carrier, negotiating interconnection agreements with ILECs and assuring that Vitts
16 complies with all federal and state rules and regulations.

17 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND**
18 **PROFESSIONAL EXPERIENCE.**

19 **A.** Prior to joining Vitts in July 1999, I was a telecommunication analyst in the Economics
20 department of the New Hampshire Public Utilities Commission. As an analyst, I was
21 responsible for testifying on behalf of the Staff of the Public Utilities Commission on
22 matters pertaining to Bell Atlantic-New Hampshire's revenues and rate design. In
23 particular, I was responsible for managing Staff's investigation into Bell Atlantic's

1 wholesale statement of generally available terms and conditions. In addition, I authored
2 several DRAFT opinions and orders for Commissioners.

3 **Q. ARE YOU FAMILIAR WITH THE APPLICATION THAT WAS SUBMITTED**
4 **BY VITTS TO THE TENNESSEE REGULATORY AUTHORITY FOR A**
5 **CERTIFICATE OF CONVENIENCE AND NECESSITY TO PROVIDE LOCAL**
6 **EXCHANGE AND INTEREXCHANGE SERVICES?**

7 **A.** Yes, I am.

8 **Q. ARE ALL STATEMENTS IN VITTS' APPLICATION TRUE AND CORRECT**
9 **TO THE BEST OF YOUR KNOWLEDGE, INFORMATION AND BELIEF?**

10 **A.** Yes.

11 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

12 **A.** I submit this testimony on behalf of Vits to describe Vits and the services it proposes to
13 offer in Tennessee and to demonstrate Vits' financial, technical, managerial, and
14 operational capabilities to operate as a provider of facilities-based and resold local
15 exchange and interexchange telecommunications services in Tennessee. I will also
16 demonstrate that grant of Vits' application meets the appropriate regulatory criteria and
17 is in the public interest.

18 **Q. PLEASE DESCRIBE THE AUTHORITY THAT VITTS SEEKS FROM THE**
19 **COMMISSION.**

20 **A.** Vits seeks a certificate of convenience and necessity to provide facilities-based and
21 resold local exchange and interexchange telecommunications services throughout the
22 State of Tennessee.

23 **Q. PLEASE SUMMARIZE THE MAIN POINTS OF YOUR TESTIMONY.**

24 **A.** My testimony will address several major issues: a description of Vits' application for a
25 Certificate of Convenience and Necessity to provide local exchange and interexchange
26 telecommunications services; a description of Vits' managerial and technical

1 qualifications; a description of Vitts' financial qualifications; a description of the specific
2 services Vitts proposes to offer in Tennessee; and a demonstration that Vitts' proposed
3 local exchange and interexchange services are consistent with the public interest.

4 **Q. HAVE VITTS OR ITS AFFILIATES BEEN AUTHORIZED TO PROVIDE SUCH**
5 **SERVICE IN ANY OTHER JURISDICTIONS?**

6 **A.** Yes. Vitts is authorized to provide telecommunications services in Connecticut,
7 Delaware, the District of Columbia, Maine, Maryland, Massachusetts, New Hampshire,
8 New Jersey, New York, Pennsylvania, Rhode Island, Vermont and West Virginia

9 **Q. HAS VITTS EVER BEEN DENIED AUTHORIZATION BY A STATE**
10 **REGULATORY AGENCY?**

11 **A.** No, neither Vitts nor any of its affiliates have ever been denied authorization by a state
12 regulatory agency.

13 **Q. HAS ANY STATE EVER REVOKED THE CERTIFICATION OF VITTS OR**
14 **ANY OF ITS AFFILIATES?**

15 **A.** No.

16 **Q. HAS VITTS OR ONE OF ITS AFFILIATES EVER BEEN INVESTIGATED OR**
17 **SANCTIONED BY ANY REGULATORY AUTHORITY FOR SERVICE OR**
18 **BILLING IRREGULARITIES?**

19 **A.** No.

20 **Q. PLEASE DESCRIBE THE CORPORATE STRUCTURE OF VITTS.**

21 **A.** Vitts is a corporation incorporated under the laws of the State of Delaware. Vitts is a
22 wholly-owned subsidiary of Vitts Networks Group, Inc. A copy of Vitts' Articles of
23 Incorporation and a copy of its Authorization to Transact Business in Tennessee are
24 attached to Vitts' application at Exhibit 1.

25

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1 **Q. PLEASE OUTLINE VITTS' MANAGERIAL AND TECHNICAL QUALIFICA-**
2 **TIONS.**

3 **A.** Vitts has the managerial and technical qualifications to provide local exchange and
4 interexchange telecommunications service in Tennessee. Vitts' management team has
5 considerable experience in marketing, network operations, financial analysis/accounting,
6 customer service, training, sales, regulatory, and other relevant areas. A description of
7 the telecommunications experience and expertise of Vitts' key management personnel is
8 attached to Vitts' application at Exhibit 2. As the biographical information for Vitts' key
9 personnel reflects, these individuals have substantial experience in running major
10 telecommunications operations. Each member of Vitts' management team will draw
11 upon his or her own experience, as well as the collective experience of the entire
12 management team, to ensure that Vitts is managed and operated efficiently and
13 profitably. Exhibit 2 describes the technical competence of Vitts' personnel in greater
14 detail.

15 **Q. PLEASE DESCRIBE VITTS' FINANCIAL QUALIFICATIONS.**

16 **A.** Vitts possesses the financial qualifications required of applicants for the license
17 requested herein. Vitts has access to the financing and capital necessary to conduct its
18 telecommunications operations as specified in this Application. As a wholly-owned
19 subsidiary of Vitts Networks Group, Inc., Vitts will rely on the financial resources of its
20 corporate parent. Vitts has attached to its Application as Exhibit 3 Vitts Networks Group,
21 Inc.'s most recent audited financial statements to demonstrate its financial qualifications.
22 Vitts possesses the sound financial support necessary to procure, install, and operate
23 facilities to provide the services proposed in this Application.

1 **Q. PLEASE DESCRIBE THE TYPES OF SERVICES THAT VITTS WILL OFFER**
2 **IN TENNESSEE.**

3 **A.** Vitts seeks a license to provide all forms of resold and facilities-based local exchange
4 service throughout the State of Tennessee. Initially, Vitts plans to provide dedicated, non-
5 switched telecommunications services on a facilities and/or resale basis for local and
6 interexchange traffic throughout the State of Tennessee. Vitts will provide dedicated
7 inbound and outbound data transport services to customers. Data transport service is a
8 dedicated point-to-point service offered at the DS-1 (1.54 megabit) or DS-3 (45 megabit)
9 level.

10 **Q. HOW WILL VITTS PROVIDE THESE SERVICES?**

11 **A.** The services offered by Vitts will be packet-switched and will not rely on the circuit
12 switching of the incumbent local exchange carrier ("ILEC"). Vitts intends to provide
13 service on a statewide basis through its own network facilities, including facilities
14 collocated in the central offices of ILECs, through unbundled network elements
15 purchased from ILECs and through the resale of ILEC services. Applicant does not
16 currently own any telecommunications facilities in the State of Tennessee. Vitts plans to
17 provide high-speed Internet access over IP/ATM Packet switches, xDSL compatible
18 loops and IOF.

19 **Q. WHAT GEOGRAPHIC AREAS WILL VITTS SERVE?**

20 **A.** Vitts seeks authority to provide resold and facilities-based local and interexchange
21 services throughout the state of Tennessee. Vitts currently does not plan to provide local
22 exchange services in the service areas of any exempt small or rural incumbent local
23 exchange carriers. At the present time, Vitts intends to provide service primarily in the
24 geographic areas currently served by BellSouth. However, Vitts requests statewide
25 authority so that it may expand its service areas in the future as market conditions
26 warrant.

1 **Q. WILL VITTS OFFER SERVICE TO ALL CONSUMERS WITHIN ITS SERVICE**
2 **AREA?**

3 **A.** Vitts plans to provide service to business customers.

4 **Q. HOW WILL VITTS HANDLE CUSTOMER SERVICE?**

5 **A.** Vitts will handle customer service orders, requests, inquiries, and/or complaints through a
6 toll-free number, (888) 656-1800, 24 hours a day, seven days a week.

7 **Q. DOES VITTS PLAN TO OFFER LOCAL EXCHANGE**
8 **TELECOMMUNICATIONS SERVICES IN AREAS SERVED BY ANY**
9 **INCUMBENT LOCAL EXCHANGE TELEPHONE COMPANY WITH FEWER**
10 **THAN 100,000 TOTAL ACCESS LINES?**

11 **A.** No.

12 **Q. PLEASE DESCRIBE THE PUBLIC INTEREST BENEFITS ASSOCIATED WITH**
13 **VITTS' PROPOSED OFFERING OF TELECOMMUNICATIONS SERVICES IN**
14 **TENNESSEE.**

1 **A.** Grant of Vitts' Application will further the public interest by expanding the availability to
2 Tennessee consumers of technologically advanced telecommunications facilities and
3 services. Vitts' network will utilize state-of-the art technology. Its presence in the
4 market will afford consumers an additional choice of data transport service providers.
5 The public will benefit both directly, through the use of the high-quality and reliable
6 digital transmission services to be offered by Vitts, and indirectly because the expanded
7 presence of Vitts in the market will increase the incentives for other telecommunications
8 providers to operate more efficiently, offer more innovative services, reduce their prices,
9 and improve their quality of service. Grant of this Application is therefore in the public
10 interest because it will enhance further the service options available to Tennessee
11 citizens.

12 **Q. DOES VITTS INTEND TO COMPLY WITH ALL TRA RULES, STATUTES,**
13 **AND ORDERS PERTAINING TO THE PROVISION OF**
14 **TELECOMMUNICATIONS SERVICES IN TENNESSEE, INCLUDING THOSE**
15 **FOR DISCONNECTION AND RECONNECTION OF SERVICE?**

16 **A.** Yes. Vitts will comply with all applicable TRA rules, statues and orders pertaining to the
17 provision of telecommunications services in Tennessee, including those for disconnection
18 and reconnection of service.

19 **Q. WHO IS KNOWLEDGEABLE ABOUT VITTS' OPERATIONS AND WILL**
20 **SERVE AS VITTS' REGULATORY AND CONSUMER SERVICE CONTACT?**

21 **A.** I am.

1 **Q. PLEASE EXPLAIN IN DETAIL VITTS' PROPOSED PROCEDURE FOR**
2 **RESPONDING TO INFORMAITON REQUESTS FROM THE TRA AND ITS**
3 **STAFF.**

4 **A.** Please address all questions about Vitts' Application to Eric J. Branfman, Esq. and D.
5 Anthony Mastando, Esq., Swidler Berlin Shereff Friedman, LLP, 3000 K Street, N.W.,
6 Suite 300, Washington, D.C. 20007, with a copy to me. All questions regarding Vitts'
7 ongoing operations should be addressed to James Atkins, Vice President of Network
8 Operations, Vitts Networks, Inc., 77 Sundial Avenue, Manchester, NH 03103 and to me.

9 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

10 **A.** Yes, it does. I reserve the right, however, to amend or modify my testimony, as
11 appropriate.

12

1 I swear that the foregoing testimony is true and correct to the best of my knowledge.

Thomas Lyle

Thomas Lyle
Regulatory Affairs Manager

Vitts Networks, Inc,

STATE OF NEW HAMPSHIRE)

COUNTY OF HILLSBOROUGH)

Subscribed and Sworn to me this 22 day of June, 2000.

Leilonnie A. Fonce
Notary Public

My Commission Expires:

LEILONNIE A. FONCE, Notary Public
My Commission Expires August 6, 2002

VERIFICATION

STATE OF NEW HAMPSHIRE

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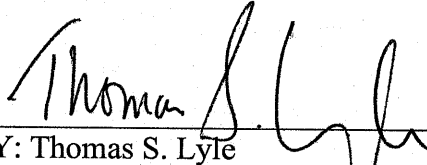
) : SS

COUNTY OF HILLSBOROUGH

)

I, Thomas S. Lyle, being first duly sworn, do hereby depose and state that:

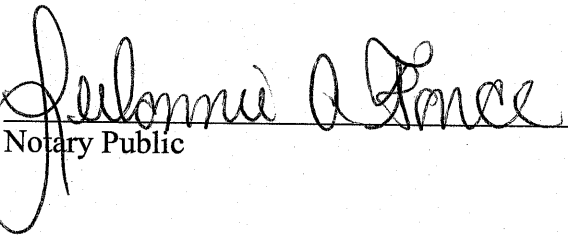
1. I am Regulatory Affairs Manager of Vitti Networks, Inc. ("Vitti"), and am authorized to make this Verification on behalf of Vitti.
2. I have read the foregoing Application and exhibits and know the contents thereof.
3. The facts contained in the Application and exhibits are true and correct to the best of my knowledge, information, and belief.
4. Vitti will operate in compliance with all applicable federal and state laws and all Federal Communication Commission and Tennessee Regulatory Authority rules.



BY: Thomas S. Lyle

TITLE: Regulatory Affairs Manager

Subscribed and sworn to me, this 22 day of June, 2000.


Notary Public

My Commission expires: _____


LEILONNNE A. FONCE, Notary Public
August 6, 2002

LEILONNNE A. FONCE, Notary Public
My Commission Expires August 6, 2002

NOTICE OF APPLICATION

TO: Incumbent Local Exchange Carriers, Competitive Local Exchange Carriers and Cooperative Telephone Companies Operating in the State of Tennessee

FROM: Eric J. Branfman, Esq.
D. Anthony Mastando, Esq.
Counsel to Vitts Networks, Inc.

DATE: June 29, 2000

RE: Application of Vitts Networks, Inc. for a Certificate of Public Convenience and Necessity to Provide Facilities-Based and Resold Local Exchange and Interexchange Telecommunications Services Throughout the State of Tennessee

This is to notify you that the above-referenced application was filed with the Tennessee Regulatory Authority ("Authority") on June 29, 2000. A copy of the application can be obtained from the Authority.

CERTIFICATE OF SERVICE

I, Doris E. Beckett, hereby certify that on this 29th day of June,

2000, a copy of the foregoing notice was served via first class U.S. Mail on the following:

Ardmore Telephone Company, Inc.
P.O. Box 549
517 Ardmore Avenue
Ardmore, TN 38449

BellSouth
333 Commerce Street
Nashville, TN 37201-3300

Century Telephone of Adamsville
P.O. Box 405
116 N. Oak Street
Adamsville, TN 38310

Century Telephone of Claiborne
P.O. Box 100
507 Main Street
New Tazewell, TN 37825

Century Telephone of Ooltewah-
Collegedale, Inc.
P.O. Box 782
5616 Main Street
Ooltewah, TN 37363

Citizens Communications Company
of Tennessee
P.O. Box 770
300 Bland Street
Bluefield, WV 24701

Citizens Communications Company
of The Volunteer State
P.O. Box 770
300 Bland Street
Bluefield, WV 24701

Loretto Telephone Company, Inc.
P.O. Box 130
Loretto, TN 38469

Millington Telephone Company, Inc.
4880 Navy Road
Millington, TN 38053

Sprint-United
112 Sixth Street
Bristol, TN 37620

TDS Telecom-Concord Telephone
Exchange, Inc.
P.O. Box 22610
701 Concord Road
Knoxville, TN 37933-0610

TDS Telecom-Humphreys County
Telephone Company
P.O. Box 552
203 Long Street
New Johnsonville, TN 37134-0552

TDS Telecom-Tellico Telephone
Company, Inc.
P.O. Box 9
102 Spence Street
Tellico Plains, TN 37385-0009

TDS Telecom-Tennessee
Telephone Company
P.O. Box 18139
Knoxville, TN 37928-2139

TEC-Crockett Telephone Company, Inc.
P.O. Box 7
Friendship, TN 38034

TEC-People's Telephone Company, Inc.
P.O. Box 310
Erin, TN 37061

TEC-West Tennessee Telephone
Company, Inc.
P.O. Box 10
244 E. Main Street
Bradford, TN 38316

United Telephone Company
P.O. Box 38
120 Taylor Street
Chapel Hill, TN 37034

Erin C. Beckett